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ANNUAL ^{3/}REPORT

OF THE

^{2/}Department of Public Health

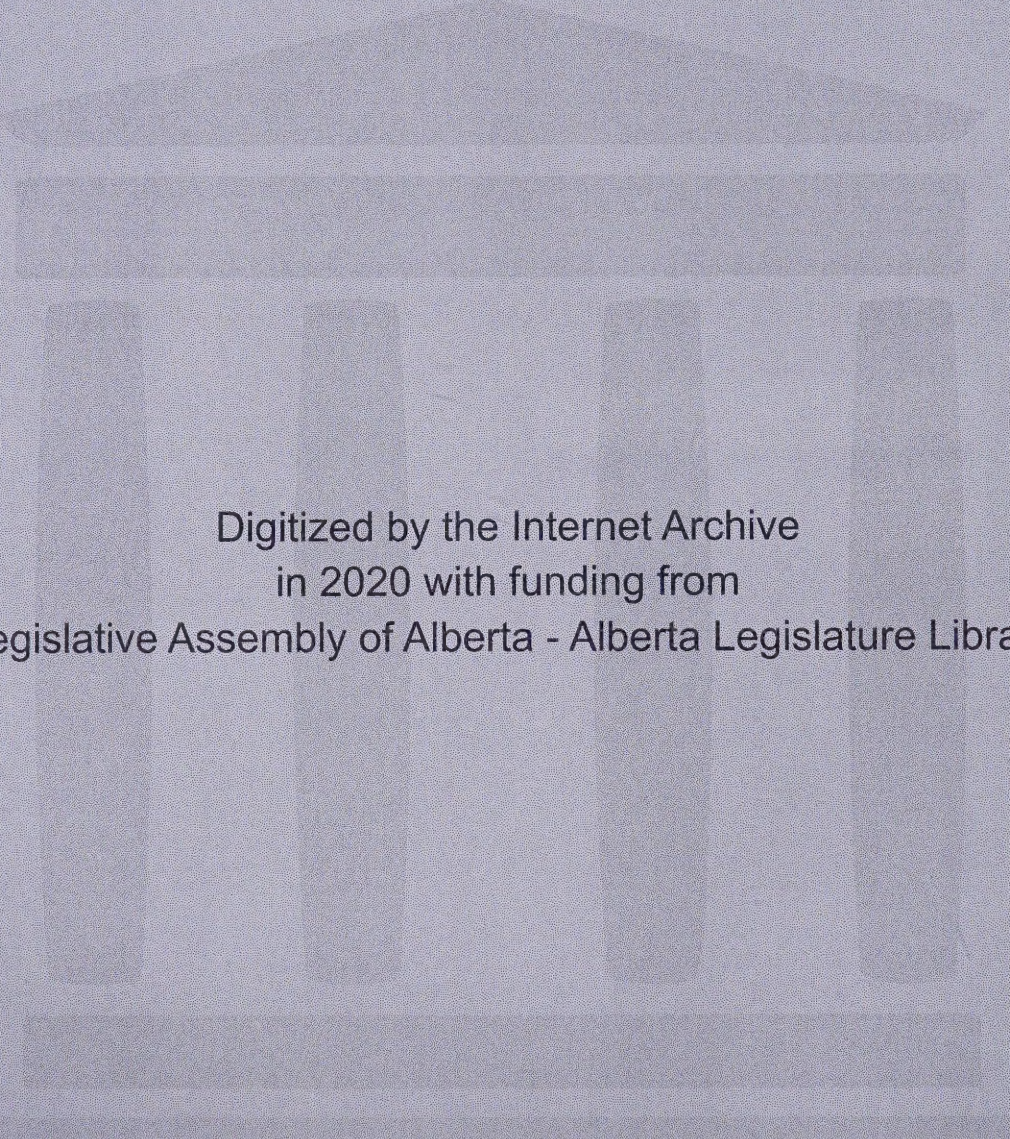
PROVINCE OF ALBERTA

^{1/}1958

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON:
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December 31, 1959.

TO HIS HONOUR,

J. PERCY PAGE,

Lieutenant Governor of the Province of Alberta.

SIR:

I have the honour to transmit herewith, the Annual Report of the Department of Public Health for the year 1958.

I have the honour to be, Sir,

Your obedient Servant,

J. DONOVAN ROSS, B.A., M.D.

Minister of Health.

December 31, 1959.

TO THE HONOURABLE DR. J. DONOVAN ROSS,
Minister of Health,
Administration Building, Edmonton, Alberta.

SIR:

I have the honour to submit herewith, the Fortieth Annual Report of the Department of Public Health.

I have the honour to be, Sir,

Your obedient Servant,

A. SOMERVILLE, B.A., M.D., D.P.H., L.R.C.P.S.(C),
Deputy Minister of Health.

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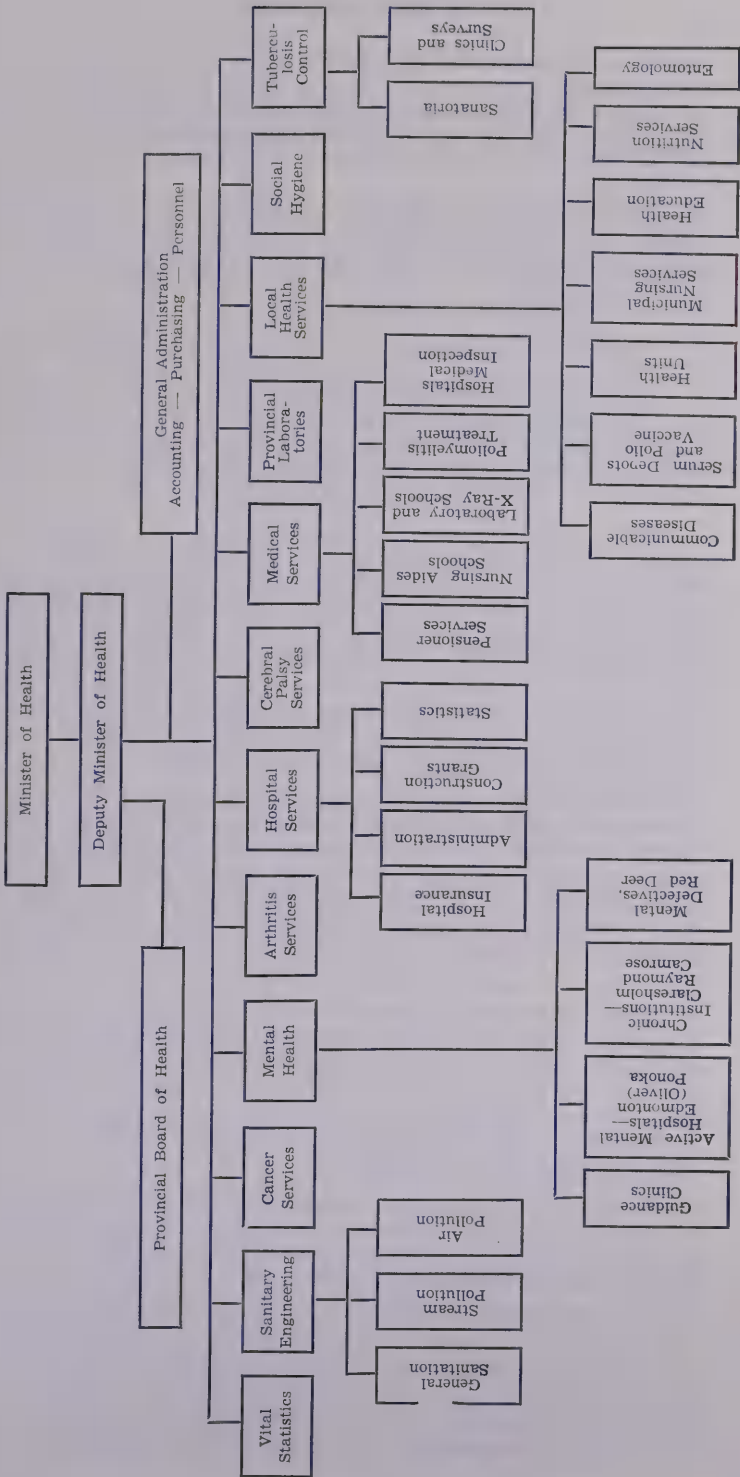
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Department of Public Health—Alberta DIVISIONAL ORGANIZATION CHART January - 1958



PROVINCIAL BOARD OF HEALTH

The Provincial Board of Health met on three occasions during the year. A review of some of the major items considered during these meetings is contained in this report.

There was no change in membership of the Board during the year. Dr. A. Somerville, Provincial Medical Officer of Health, continued as Chairman, and Dr. R. D. Stuart, Provincial Bacteriologist, and Mr. H. L. Hogge, Provincial Sanitary Engineer, were members.

REGULATIONS PASSED OR AMENDED DURING THE YEAR

O.C. 1047-58 approved new regulations respecting swimming pools and bathing places. These replaced the previous regulations. The new regulations were brought up to date in respect of the design and construction of swimming pools and in methods of filtering and treating the water in pools.

O.C. 1048-58 approved amendments to the regulations respecting dairy farms, Milk plants, fluid milk and table cream. The regulations now specify that high temperature short time pasteurization shall require at least 161 degrees for 16 seconds followed by cooling to less than 45 degrees. Other changes in the regulations provide for the use of farm bulk milk tanks and milk tank trucks and establish maximum temperatures for milk in such containers. Another change establishes the maximum temperature for milk in storage in milk plants at 40 degrees and at time of delivery to the consumer at 50 degrees.

O.C. 1384-58 approved amendments to the regulations for the control of communicable disease. A change was made to the quarantine requirements for contacts of persons suffering from scarlet fever (scarletina) and streptococcal sore throat so that there shall be no quarantine for such contacts except those who are handlers of milk which is not pasteurized who are not permitted to follow that occupation for the isolation period of the case.

O.C. 1385-58 approved new sections to the regulations governing food and drink. In order to prevent the sale of diseased poultry it is required that eviscerated and cut up poultry over eight weeks of age shall be subjected to veterinary inspection. It is also provided that new plants for the manufacture of food for humans must obtain approval of the local board of health before commencing operations.

O.C. 1386-58 approved a change in the regulations relating to bakeshops so that wherever more than five persons are employed separate toilets are required. This change is in line with the regulations regarding plumbing and drainage.

O.C. 1387-58 approved changes in the regulations respecting water and ice. Changes were made to the requirements as to the location of wells, construction of drinking fountains and chlorination of public water supplies to bring these requirements to the standards indicated by present knowledge. Requirements as to the numbers of samples of water from public distribution systems

to be submitted for analysis have been included in the regulations together with standards of acceptability of the results. The sections dealing with ice have been altered so that the manufacture of ice is now covered as well as the obtaining of ice from natural sources.

O.C. 1388-58 approved new regulations relating to industrial and construction camps. These replace former regulations. Some of the changes from former regulations are for administrative clarification and became necessary with the growth of health unit service in the province and with the increasing use of mobile units in camps. The requirements concerning ventilation and in regard to dishes and dish cleansing have also been clarified. Changes in air space requirements were made to permit the use of mobile units with mechanical ventilation which provides at least 300 cubic feet per occupant. In all other cases 400 cubic feet is still required. Camps consisting of mobile units are not required to provide bathing and laundry facilities if these are reasonably available in the vicinity.

O.C. 1389-58 approved amendments to the regulations governing disinfection by the use of hydrocyanic acid gas. The regulations now permit the use of gas by licensed persons for the extermination of rats in buildings not used for human habitation without a 72-hour waiting period after notifying the proper authorities.

O.C. 1716-58 approved changes in the regulations governing restaurants. It is now required that restaurants serving unpasteurized milk must inform patrons by means of the menu or by placard. The changes in the regulations also provide for a system of permits which restaurants will be required to obtain from local boards of health.

During the year a few cases of persons who were suffering from tuberculosis in an infectious form and who were refusing treatment were drawn to the attention of the Board. After proper investigation in each instance the Board issued four orders covering removal of these persons to sanatoria for treatment under the provisions of the communicable disease regulations. This can be compared with two such orders in 1957, 11 in 1956 and 17 in 1955 and would indicate that the improvement in conditions making such orders necessary has continued.

Immunization programs continue to be a major weapon in the control of communicable disease. Each year a further segment of the population receives the protection against poliomyelitis afforded by Polio Vaccine made available through health authorities. During the year the Department through the Division of Local Health Services made poliomyelitis immunization available to members of the provincial public service under 40 years of age in Edmonton. The response was excellent, with about 2,400 persons taking advantage of the protection offered.

Ten persons were appointed Executive Officers of the Provincial Board of Health during the year. Twelve cards were returned. At the year's end 35 such authorizations were in effect, there having been 37 at the end of 1957. Persons holding appoint-

ments as Executive Officers are employees of the Provincial Department of Public Health or are municipal nurses.

During the year 86 nurses who had been appointed by local boards of health to be Executive Officers were issued authorizations by the Provincial Board certifying them to be capable of performing inoculations and vaccinations in accordance with section 41 of The Public Health Act. Fifty-nine authorizations were returned and at the year's end 154 were still in effect. One hundred and twenty-seven had been in effect at the first of the year. The major portion of the increase appears to have been due to the increased awareness of local authorities of the availability of such certification.

The industrial growth of many parts of the province has introduced the possibility of significant air pollution. Research programs commenced during the year in various localities are expected to provide information which will assist the Board to take any steps which may be necessary for control of air pollution. The Board gave attention to possibilities of air pollution by some industries and gave instruction where desirable for measures to reduce the hazard.

The year 1958 was not one of spectacular developments in the field of stream sanitation. Rather, it was a year of steady activity to continue the control of pollution.

A trend of recent years has been the increasing use of trailer coaches (or mobile homes) for family accommodation. The trailer coach of the last few years frequently contains many of the facilities and features usually associated with standard dwellings. The trailer coach is no longer strictly an emergency or holiday makeshift. For many families it has become a permanent home. The provision of adequate parking areas for these modern trailer coaches has generally lagged behind the need. This has, of course, given rise to some serious problems in sanitation and in other fields. At the year's end reviews of existing regulations were under way so that consideration can be given to recommendation for such amendments as may be proper.

Many other matters related to the health of the people of the province received attention during the year. These included sanitation in beverage rooms and in recreation camps, problems relating to the location and operation of waste disposal grounds near large centres, water shortages in some communities and the renovation and disinfection of second-hand bedding. In these and other matters the Board gave direction to the various Divisions of the Department and to local authorities so that there would be a broad program to improve the health of the people of the province.

LEGISLATION PASSED DURING THE YEAR

Health Unit Act Amendment Act (Chapter 23)

This Act amended The Health Unit Act, being chapter 139 of the Revised Statutes.

Section 3 was amended by adding a subsection (4) providing that the board of the health unit shall be the local board of health

and the medical officer of the health unit shall be the local medical officer of health of the contributing municipalities.

Section 7 was replaced by a new provision authorizing boards to make payment to members of allowances not exceeding amounts paid by their respective councils for similar services.

Sections 11 and 12 were struck out and replaced by a new section 11 requiring health units, for pension purposes, to advise the Department of the commencement and termination of employment of personnel. Section 13, subsection (2) was amended to remove the reference to the amount of the grant to be paid by the Department. These words were removed as the grants are no longer related to certain specified expenses.

Section 15 was amended to remove the necessity of the Minister approving the budget and to add a deadline date of January 1st for preparation of it.

Section 16 was replaced with a new section that changes the whole basis of grants under the Act. The grant will be on a per capita basis and as the cost of operating a unit varies with the size, the per capita grant varies accordingly. The amount of the grant is one dollar and forty-five cents per person less one cent for each one thousand of population up to fifty thousand persons. Where the population is fifty thousand or more the grant is ninety-five cents. The grant for dental services is 20% of the general grant. The health unit is required to match the grant with a sum equal to two-thirds of the grant.

Section 17, subsection (3) was amended to provide that the population of the preceding calendar year should be used in working out the support for a particular fiscal year.

Section 18 was amended. By an amendment to subsection (1) the approval by the Minister of the auditor is no longer required. Subsection (3) was replaced by a new provision requiring health units to refund to the Department and to the contributing councils the unexpended balance that exceeds ten per cent of the basic budget of the health unit.

Section 20, subsection (2) was amended by adding a new subclause (a1) authorizing the making of regulations prescribing the types of service and the level of service to be provided by a health unit.

Section 21 was repealed.

Section 22 was amended to remove references to health units set up under other Acts. These units no longer exist.

Section 23 was struck out and replaced with a new provision authorizing contributing councils to withdraw their support from health units upon notice, effective at the end of a fiscal year.

Section 24 was repealed.

This Act came into force on the 14th day of April, 1958.

Hospitalization Benefits Act Amendment Act (Chapter 26)

This Act amended The Hospitalization Benefits Act, being chapter 30 of the Statutes of Alberta, 1957.

Section 2 was amended. The definition of "capital costs" in clause (b) was amended to exclude from the term "capital costs" capital expenditures financed by grants of the Government of Canada or the Province and to include depreciation of capital equipment as a capital cost. Clause (f) defining "municipality" was amended to remove reference to national park areas established as municipal hospital districts. A new subsection (2) was added in connection with the change to clause (f). By this new subsection national parks are to be considered to be municipalities for the purpose of this Act.

Section 5 was amended to provide as follows: Ratepayers will not have to reside in the Province for any stated period in order to become eligible for benefits; Dependents of eligible persons will be entitled to hospitalization; To be eligible a person will have to be a resident of the Province at the time he is admitted to hospital unless the Province enters into an agreement with the Government of Canada in which case no specified period of residence will be required to make a person eligible for the benefits available.

Section 8 was amended by replacing clause (d). The new clause adds to the group for which the Province may pay the patient's co-insurance and includes arthritic patients, poliomyelitis sufferers and for a limited period persons approved by a cancer clinic. A grant may also be made in respect of persons who are in receipt of a pension or allowance in which the Province participates.

Section 11, subsection (1) was amended to correct a reference to The Municipalities Assessment and Equalization Act.

Section 12 was amended. A new subsection (1) requires each municipality to make provision for the hospitalization facilities required for the hospitalization of its residents. Subsection (3) was amended to provide that if a municipality fails to pay any amount it is required to pay under this subsection, the account may be paid from the General Revenue Fund of the Province and deducted from any grants payable by the Province to the municipality. A new subsection (3a) was added authorizing the Lieutenant Governor in Council to make provision for provincial payment towards the capital cost of hospitalization in cases where residence in one or more municipalities does not permit of fixing any one municipality with the responsibility for such costs.

Section 7 of the amending Act provides for the termination of all agreements for hospitalization benefits, etc., under The Hospitalization and Treatment Services Act, The Maternity Hospitalization Act and The Poliomyelitis Sufferers Act.

This Act came into force on the first day of April, 1958.

*Hospitalization and Treatment Services Act Amendment
Act (Chapter 27)*

This Act amended The Hospitalization and Treatment Services Act, being chapter 146 of the Revised Statutes.

Section 3 was amended to include among the persons to whom services may be provided persons receiving an allowance under The Blind Persons Act, The Disabled Persons Act and The Disabled Persons Pensions Act.

Section 5 was repealed.

This Act came into force on the 14th day of April, 1958.

The Municipal Hospitals Act Amendment Act (Chapter 48)

This Act amended The Municipal Hospitals Act, being chapter 216 of the Revised Statutes.

Section 11, subsection (1) was amended to remove the minimum tax requirement by repealing clause (i).

Sections 13 and 14 were repealed as provision for hospitalization of resident non-ratepayers is provided for under The Hospitalization Benefits Act.

Section 103, subsection (2) was amended to permit a debenture thereunder to be dated at any time within three years after the by-law.

Section 107 was amended. Subsection (1) was amended to permit a capital expenditure up to ten thousand dollars without a plebiscite and to provide that the authorizing by-law for the borrowing for additional capital expenditure be put to the electors as is the case under section 102. Subsection (2) was replaced by a new subsection directing that the by-law approval vote be held in the same manner as a vote for the ratification or rejection of a hospital scheme.

Section 110, subsection (1) was amended to eliminate personal property from the assessment, to use the assessment as of December 31st of the preceding year rather than assessment data one year old used for taxation purposes in the preceding year, and to authorize the Alberta Assessment Equalization Board to determine and order an equitable amount where all municipalities within the hospital district do not assess on a uniform index of value.

Section 111 was repealed.

Subsection (5) of section 112 was amended to provide that after March 31st the contributions of municipalities with respect to hospital operating costs shall be as provided for in sections 11 and 12 of The Hospitalization Benefits Act.

Section 116, subsection (5) was amended by striking out clause (a).

A new section 121 was added. This new section provides that the spouse of any person entitled to vote at any poll held

pursuant to the Act is also entitled to vote at the poll upon taking the declarations set out in the new section.

This Act came into force on the 14th day of April, 1958.

1957 Municipal Hospital Votes Validation Act (Chapter 49)

This Act cited as The 1957 Municipal Hospital Votes Validation Act, validated certain polls held in 1957 in the Municipal Hospital Districts of Jasper, Hinton, Hanna, Wainwright and Lloydminster. The votes in question were held without taking into account the amendment regarding qualifications to vote made to The Municipal Hospitals Act by chapter 59 of the 1957 Statutes.

This Act came into force on the 14th day of April, 1958.

Nursing Aides Act Amendment Act (Chapter 53)

This Act amended The Nursing Aides Act being chapter 224 of the Revised Statutes.

The Nursing Aides training program was extended and a second school was established in Edmonton. The extension resulted in some administrative changes becoming necessary and the Act was amended to authorize the same. The Vocational Training Advisory Council ceased to function and the Director of Vocational Training of the Department of Education was substituted, necessitating changes in the references throughout. Certain duties formerly exercised by the Registrar-Consultant are now exercisable by the Director of Nursing Aide Education.

This Act came into force on the 14th day of April, 1958.

Public Health Act Amendment Act (Chapter 63)

This Act amended The Public Health Act, being chapter 255 of the Revised Statutes.

Section 7 was amended. Subsection (1) was amended to authorize the Lieutenant Governor in Council to make regulations in respect of the training and experience of ambulance drivers and ambulance attendants. Subsection (3) was amended to make provisions that will conform with the requirements of The Regulations Act while providing that the regulations take effect upon filing.

Subsection (6) of section 14a was amended to make the time after which a new vote on fluoridation may be held two years rather than one where a fluoridation by-law was disapproved, so that the times in subsections (6) and (7) will correspond.

This Act came into force on April 14th, 1958.

Tuberculosis Act Amendment Act (Chapter 90)

This Act amended The Tuberculosis Act, being chapter 347 of the Revised Statutes.

A Part II was added to The Tuberculosis Act providing a procedure for ordering the detention in a sanatorium of recalci-

trant infectious tuberculosis sufferers. The procedure provides that where a person suffering from open tuberculosis or appearing to suffer refuses to voluntarily undergo treatment, an information may be laid against him and upon a hearing the magistrate may order the person to be admitted to and detained in a sanatorium for a period not exceeding one year. Where necessary, the person can be recommitted for a further period not exceeding one year.

This Act came into force on April 14th, 1958.

*University of Alberta Hospital Act Amendment Act
(Chapter 92)*

This Act amended The University of Alberta Hospital Act, being chapter 352 of the Revised Statutes.

Section 2 was amended by adding a subsection (2) which makes the fiscal year of the University concurrent with the calendar year starting with the year 1958, as is the practice of other hospitals in the Province.

As a result of the change in the fiscal year section 8, subsection (1) was amended to require the annual preparation of estimates to be made by the first day of October.

Section 14, subsection (1) was amended to require the accounts of the Board to be made up to the last day of the fiscal year and section 15, subsection (1) was amended to make it applicable to the last day of the fiscal year rather than the thirty-first day of March.

This Act came into force on April 1st, 1958, and is applicable to the year 1958.

DEPARTMENT OF PUBLIC HEALTH

 DEPARTMENT OF PUBLIC HEALTH
 REVENUE AND EXPENDITURE FOR FISCAL YEAR ENDING MARCH 31, 1959

		Salaries	Expenses	Revenue
601	Administration - General	13,735.00	\$ 2,889.78	\$
602	Administration - General	88,149.21	6,543.66	188.95
618	Administration - Postage		8,399.78	
	Hospitals—			
603	Grants		1,760,514.96	
616	Administration	88,536.80		10,141.95
	Grants and Services		25,781,632.44	7,730,319.89
646	Hospital Construction Grants		1,562,436.08	1,181,258.58
605-1	Communicable Diseases	8,571.35	101,036.78	
605-2	Sanitary Engineering	62,864.51	18,710.38	40,215.09
606	Public Health Nursing	10,215.60	138,641.07	53,147.22
607	Bureau of Vital Statistics	71,045.35	17,581.93	123,560.50
609	Insulin		11,965.34	
610	Social Hygiene	71,429.92	24,019.98	49,694.92
617	Medical Services	35,408.00	1,063,265.53	
626	Public Health Laboratories		398,748.24	11,891.92
631	Poliomyelitis		190,039.22	
633	Cancer Services	218,875.90	602,443.37	264,160.80
638	Civil Service Nurse	6,280.00	986.62	
639	Public Health Education	22,007.63	7,893.05	7,104.58
640	Entomology and Vector Control	10,064.83	1,712.81	
641	Health Units	11,775.00	740,172.10	281,422.61
643	Nursing Aides	68,490.57	198,313.49	297,388.86
644	Laboratory and X-Ray Schools	16,136.79		
645	Health Services - Extension Program	4,606.86	1,563,232.74	1,717,225.70
648	Grants for Public Health Services		165,497.40	
649	Alcoholism Foundation of Alberta		100,000.00	
651	Cerebral Palsy Clinics	63,743.12	27,685.38	37,126.90
652	Arthritis Services	12,271.29	4,720.08	

Division of Mental Health

622	Director's Office and Guidance Clinics	121,072.63	17,533.73	60,859.13
612-1	Provincial Mental Institute, Edmonton	1,760,041.65	457,450.46	507,526.68
613-2				
612-3				
613-1	Provincial Mental Hospital, Ponoka	1,579,869.18	491,825.95	411,391.70
612-4	Provincial Auxiliary Mental Hospital, Claresholm	66,025.31	31,046.42	22,020.56
612-5	Provincial Auxiliary Mental Hospital, Raymond	86,540.44	29,685.19	27,588.22
612-6	Rosehaven, Camrose	526,642.22	108,319.73	240,070.62
614-1	Provincial Training School, Red Deer	992,622.68	286,437.72	219,317.09
614-2	Deerhome, Red Deer	388,823.67	155,426.46	186,936.97

Division of Tuberculosis Control

604-1	Director's Office and Clinics	71,130.22	81,764.04	35,139.09
604-2	Baker Memorial Sanatorium, Calgary	746,690.94	191,524.33	249,412.60
604-3	Aberhart Memorial Sanatorium, Edmonton	778,684.56	177,272.61	205,113.72
		\$ 8,002,351.23	\$36,527,368.85	\$13,970,224.85

Total Expenditure—Public Health Department	\$44,529,720.08
Less: Public Health Revenue	13,970,224.85
Net Expenditure—Department of Public Health	\$30,559,495.23

The Vital registrations during the year were as follows:

Births	36,842
Marriages	10,186
Deaths	8,237

The population for 1958 was officially estimated as 1,201,000 and, therefore, the following rates have been recorded:

Year	No. of Births	Birth Rate	No. of Marriages	Marriage Rate	No. of Deaths	Death Rate
1953	31,376	31.3	10,126	10.1	7,646	7.6
1954	33,593	32.3	9,960	9.6	7,520	7.2
1955	34,357	32.2	9,844	9.2	7,956	7.5
1956	34,851	31.1	9,965	8.9	7,786	6.9
1957	35,719	30.8	10,117	8.7	8,255	7.1
1958	36,842	30.7	10,186	8.5	8,237	6.9

On the whole these figures are good. The total number of births is up although the birth rate is down slightly. The natural increase (excess of births over deaths) was 28,605.

Alcoholism

The Alcoholism Foundation of Alberta is a voluntary society supported during the fiscal year 1958-59 by the Province of Alberta by a grant of \$100,000.00. This was approximately 76% of their income.

The Foundation recognizes alcoholism as a treatable illness and a public health responsibility and is, therefore, concerned with problem drinking. Its aim is to prevent problem drinking through education, treatment and research. In carrying out this program 539 persons were treated in 1958, bringing the total treated to 3,621 since the inception of the service, of which 56% are reported as having achieved more or less recovery.

Hospital Services

1958 was a big year in hospital insurance with the introduction of a full-fledged hospital insurance program. Two formal studies of hospital insurance have been made in this province and a hospital insurance program has evolved since 1917. In that year the first Municipal Hospitals Act was passed and in 1919 the first municipal hospital was set up at Mannville giving hospital insurance to the residents of that area. Except for a small provincial per diem grant the residual costs of this service were a municipal responsibility. The municipal hospital areas slowly spread throughout the province until 1955, in which year the privilege of dollar-a-day hospital service was extended to municipalities which cared to establish the system in relation to standard ward care but without establishing a municipal hospital district. In 1958 the program was extended to cover the "extras" such as laboratory services and x-ray and the per diem charge was raised to about two dollars.

Up to this time the service was available to ratepayers only, with the non-ratepayer being in a position to buy a hospital services ticket to make the family eligible for the same service. The cost of these tickets varied from \$8.00 to \$14.00 per family per year. In spite of this very cheap rate only a small number of non-ratepayers purchased these tickets.

While this was developing the Government had instituted a few special hospital programs including free hospital care for polio cases, for maternity cases, a limited degree of cancer hospitalization and a free hospital service for the pensioner groups.

Effective April 1, 1958, this hospital insurance service was extended to cover every resident of Alberta without any special premium and without any special tax to cover the service. Effective July 1, 1958, federal participation commenced and the service became available immediately to any person who had entered Alberta legally with the intention to establish domicile in the province. The costs of this program come from the per diem charge against the patient, a small mill-rate contribution from the municipalities, the federal contribution covering about 35% of the standard ward cost, with the province in the position of covering all the residue.

Two further problems in hospital insurance are still under study. These are the problems of capital costs and of out-patient services.

Mental Health Services

A new institution for mental defectives has been developing over the past couple of years. Early in 1958 this institution admitted its first patients and further building is in progress. It is known as Deerhome and is situated near the Provincial Training School at Red Deer. It is planned for the custodial care of mental defectives for whom training is not considered possible, and will eventually reach a capacity of 1,200. This will release for active treatment cases, that number of beds at the Provincial Training School and in our active treatment mental hospitals. This splendid building will fill a long-felt need in giving additional space for this type of patient and in getting the custodial mental defectives out of the active treatment mental hospitals.

Perinatal Mortality Studies

A special committee of the College of Physicians and Surgeons, using funds provided under the Child and Maternal Health Grant, has continued the study of perinatal deaths. In 1958 their report covered 855 deaths, including 412 stillbirths and 443 deaths of infants over 1,000 grams (2 lbs. 3 oz.) who died within one week of birth. In addition, there were 140 deaths among babies under 1,000 grams.

This year's report shows a slight increase in stillbirths and a slight decrease in the number of deaths in the first week, leaving the total perinatal death rate practically level for the past four years. The chief cause of death in both the stillbirths and among those dying in the first week has been prematurity, and during the first three years there has been a slight increase but the 1958 figure shows a distinct improvement.

This committee has regularly recommended that premature cases should be transferred to larger hospitals and, if possible, the case should be in the larger hospital before the birth occurs. The statistics show that this recommendation is realistic. It is also recommended that in cases where an exchange transfusion appears likely, that the case should be transferred for delivery to a point where such a transfusion is possible.

It is anticipated that this study will continue.

Respectfully submitted,

A. SOMERVILLE, B.A., M.D., D.P.H., L.R.C.P.S. (C),
Deputy Minister of Health.

DIVISION OF LOCAL HEALTH SERVICES

E. S. ORFORD SMITH, M.A., M.B., B.Chir., D.P.H., D.I.H., *Director*

The Division of Local Health Services comprises the following branches, each under the supervision of a director:

- (1) Communicable Diseases,
- (2) Health Units,
- (3) Public Health Nursing,
- (4) Health Education,
- (5) Nutrition Services,
- (6) Entomology.

The Division collaborates with other Divisions in providing local Boards of Health, Government Departments and other agencies with consultant services in the various phases of public health and preventive medicine. Close liaison is also maintained by officers of the Division with faculty members at the University of Alberta, who are concerned with the teaching of these subjects to medical students and graduate nurses.

Each director within the Division keeps in touch with his opposite number in the Department of National Health and Welfare, and through the Director of Local Health Services the Province is represented on the Maternal and Child Health Advisory Committee in Ottawa.

As a voluntary project in 1958, certain members of the Division, with the assistance of the Civil Service Nurse, undertook the immunization of some 2,500 civil servants in the provincial capital against poliomyelitis.

The reports which follow describe in more detail the functions and responsibilities of the branches of the Division, and record their achievements during the year.

COMMUNICABLE DISEASES

E. S. ORFORD SMITH, M.A., M.B., B.Chir., D.P.H., D.I.H., *Director*

The Communicable Diseases branch of the Division of Local Health Services is responsible for:

- (1) The collection and transmission of information, and the compilation of statistics, concerning the morbidity and mortality of communicable diseases;
- (2) Consultant services to local health authorities on matters relating to the control of communicable diseases;
- (3) The application of measures for controlling communicable diseases in areas administered by the Provincial Government which are not served by Health Units;
- (4) The interpretation of Communicable Disease Regulations;
- (5) The distribution of immunizing antigens and sera;
- (6) Supervision of the utilization of immunizing agents in limited supply.

POLIOMYELITIS

The incidence of poliomyelitis in 1958 was the lowest on record since 1945. There were 37 reported cases, of which 22 were paralytic and 15 non-paralytic, and there was one death. Eight of the paralytic cases were reported to have been immunized, five with three doses of vaccine each and three with two doses each. The fatal case was a man of 24, who had not been immunized.

It is now fairly generally accepted that, except during an epidemic, many and perhaps even most of the illnesses which are customarily diagnosed as non-paralytic poliomyelitis are actually not caused by the polio virus, since the identical clinical picture frequently results from a Coxsackie or ECHO virus infection. It was with these considerations in mind that in October 1958 the Dominion Council of Health recommended that the expression non-paralytic poliomyelitis be discontinued, and that the term meningitis, viral or aseptic, be used to describe this syndrome. It was also recognized that the specific aetiology could only be determined by laboratory investigation.

The immunization program for 1958 enabled local health authorities to offer polio vaccine to all persons up to age 40 and to expectant mothers at any age. It is conservatively estimated that by the end of December some 600,000 persons, including 162,000 adults, were at least partially protected with one or more doses of vaccine, and that, of these, some 470,000, including 114,000 adults, were fully protected with three doses.

TYPHOID FEVER

There were six cases of typhoid fever reported during the year, the lowest number since 1954, and there were no deaths. Four of the cases were children, and three of the cases, including two of the children, originated from the Indian Reserve at Saddle Lake.

DIPHTHERIA

There were 17 cases of diphtheria reported during 1958, less than half the number notified in the previous year, and there were two deaths. Six of the cases, including one of the children who died, were from Conklin, a hamlet on the railway between Lac la Biche and Fort McMurray. The occurrence of these cases in an area which is not served by any Health Unit prompted the organization of a special immunization program for the widely-scattered small communities of north-eastern Alberta. By arrangement with the Department of Municipal Affairs, a male nurse was employed to cover three times over, at monthly intervals, the area between the northern boundary of the Athabasca Health Unit and the border of the North-West Territories.

Diphtheria in this day and age ought never to occur, for there is no disease against which immunization is more effective. The fact that it is endemic in Alberta means that it is necessary always to maintain children at their maximum level of immunity. The apathy and ignorance of a small minority of parents who hinder the achievement of this aim can only be overcome by effective health education, but it is as much the responsibility of public health workers to meet this challenge as it is their duty to inject toxoid.

MEASLES

There was a gratifying reduction in the incidence of measles from 12,337 cases in 1957 to 3,383 cases in 1958, and there was a proportionate decrease in the number of deaths, from 16 to 4. Past records indicate that there is a very definite tendency for measles to become epidemic in alternate years, and the drop is in conformity with this established pattern. Moreover, until a vaccine is discovered, we must accept the fact that the pattern will continue. This does not mean that we can afford to be complacent; rather does it emphasize that we must be constantly alert for the opportunity to protect, by the timely administration of gamma globulin, very young and debilitated children who are known to have been recently exposed to infection, for these are the ones who may die from measles.

STREPTOCOCCAL INFECTIONS

The reported incidence of scarlet fever and streptococcal sore throat increased by more than one-third, from 774 cases in 1957 to 1,062 cases in 1958. One fatality occurred in 1957, but none in 1958. It has been suggested that the rise in morbidity was attributable to a change in the Communicable Disease Regulations, whereby quarantine for contacts was no longer required.

The justification for abolishing quarantine lay in the observation that the contacts who were subjected to this measure were no more of a threat to the community than the carriers of haemolytic streptococci, who were far more numerous and, being unrecognized, were allowed to remain at large. A review of the records for previous years shows that the increased incidence of 1958 was well within the limits of normal variation.

From the records of the Division of Medical Services it has been ascertained that there were approximately 200 children under 18 years of age who first had rheumatic fever in 1958. In view of the availability of free penicillin for children with a history of rheumatic fever, it is almost certain that the reporting of rheumatic fever is at a much higher level than that of scarlet fever and streptococcal sore throat. While no inference can, therefore, be drawn regarding the frequency with which a streptococcal throat infection is followed by rheumatic fever, we are compelled by the incidence of rheumatic fever alone to recognize that there is a significant risk of this complication. The administration of penicillin for the prevention of secondary attacks of rheumatic fever can, with adequate follow-up, be a powerful force in the reduction of cardiac invalidism. The complete elimination of rheumatic heart disease, however, depends fundamentally upon the successful prevention of primary attacks of rheumatic fever, and this can only be achieved if the acute streptococcal infections which precipitate these attacks are diagnosed and adequately treated.

LEPROSY

Two cases of leprosy were reported during the year, and both were admitted to the Canadian Government Leprosarium at Tracadie, N.B. One of the patients was a 9-year-old Chinese boy, who had entered Canada from Hong Kong three years previously. The other was a 39-year-old nun, born in China of White Russian parents, who had lived most of her life in Shanghai, and who came to Canada in 1952. Meanwhile, a woman of 59 who had never been out of Canada, and who was notified as a case in 1957, was found not to be suffering from leprosy, and returned from Tracadie with her myxoedema very much improved.

TABLE 1
NUMBER OF CASES OF COMMUNICABLE DISEASES REPORTED IN THE YEARS
1957 and 1958

	1957	1958
Acute Anterior Poliomyelitis	65	37
Diphtheria	39	17
Dysentery	70	83
Food Infections	14	83
Leprosy	*1	2
Measles	12,337	3,383
Meningitis	6	5
Paratyphoid Fever	2	5
Rocky Mountain Spotted Fever		
Rubella	8,676	2,268
Scarlet Fever and Septic Sore Throat	774	1,062
Smallpox		
Tetanus	1	
Tuberculosis—Pulmonary (new active cases)	479	449
Tuberculosis—Non-pulmonary (new active cases)	86	76
Typhoid Fever	16	6
Trachoma		
Undulant Fever	5	1
Whooping Cough	889	684

*Of the 2 cases of leprosy originally reported for 1957 one was subsequently re-diagnosed as other than leprosy.

TABLE 2

DEATHS ASCRIBED TO COMMUNICABLE DISEASES IN THE PROVINCE OF ALBERTA
FOR THE YEARS 1957 and 1958

Name of Disease	1957		1958	
	Total Deaths	Rate per 100,000 of population	Total Deaths	Rate per 100,000 of population
Acute Anterior Poliomyelitis	6	0.5	1	0.1
Gastroenteritis and Colitis (except Diarrhoea of the Newborn)	59	5.1	69	5.7
Diphtheria	6	0.5	2	0.2
Influenza	135	11.6	21	1.7
Measles	16	1.4	4	0.3
Meningococcal Meningitis	4	0.3	1	0.1
Pneumonia (all forms)	352	30.3	338	28.1
Scarlet Fever and Streptococcal Sore Throat	1	0.1	0	0.0
Smallpox	0	0.0	0	0.0
Tuberculosis (Pulmonary)	60	5.2	35	2.9
Tuberculosis (Other)	8	0.7	9	0.7
Typhoid Fever	2	0.2	0	0.0
Paratyphoid and other Salmonella infections	1	0.1	0	0.0
Undulant Fever (Brucellosis)	0	0.0	0	0.0
Whooping Cough	4	0.3	2	0.2
Population of Alberta in 1957 1,160,000	Population of Alberta in 1958 1,201,000			

TABLE 3: COMMUNICABLE DISEASE CASES REPORTED IN 1958 BY SEX, AGE AND MONTH OF REPORTING

SEX		MONTHS												AGES					TOTAL		
		Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14		15-19	20-over	Age not stated
MEASLES																					
Edmonton	305	364	55	23	67	99	142	109	40	24	22	15	16	57	26	319	313	3	8	666	1,019
Calgary	526	493	277	200	168	75	72	30	9	5	6	45	35	97	26	189	789	9	6	1,019	1,019
Lethbridge	42	41	52	18	3	5	5	1	1	1	1	1	2	1	1	17	64	1	1	83	83
Urban	344	319	164	97	53	25	36	31	88	22	8	27	59	53	52	259	261	5	4	663	663
Rural	475	474	170	100	27	20	84	17	73	18	21	102	219	98	39	348	515	4	13	949	949
Total	1,692	1,691	718	438	318	219	339	187	210	70	58	191	330	305	143	1,132	1,942	22	32	3,383	3,383
POLIOMYELITIS (PARALYTIC)																					
Edmonton	1	5	2	...	...	...	...	...	...	...	1	1	1	...	...	...	1	1	1	4	17
Calgary	2	1	...	...	...	...	...	...	...	2	2	1	...	...	...	1	1	1	1	1	7
Lethbridge	2	1	...	...	...	...	...	...	...	1	2	...	...	1	...	...	1	1	2	4	10
Urban	6	4	...	3	...	...	...	2	...	2	...	3	...	1	...	3	2	1	4	10	10
Rural	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	11	11	2	3	...	...	...	2	...	7	3	4	...	1	...	5	4	2	11	22	22
POLIOMYELITIS (NON-PARALYTIC)																					
Calgary	2	7	...	1	...	...	...	...	1	1	5	1	...	...	1	...	5	...	3	9	9
Urban	3	1	...	...	...	...	...	...	...	1	3	1	...	...	...	...	1	2	1	1	1
Rural	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	5	10	...	1	...	...	...	...	2	2	8	2	...	...	1	...	8	2	4	...	15

PULMONARY ACTIVE TUBERCULOSIS

Calgary	30	19	9	4	9	4	3	3	1	1	...	6	6	3	1	1	5	1	36	5	49
Edmonton	38	37	7	3	5	10	5	10	4	3	...	11	6	5	8	7	4	4	52	1	75
Lethbridge	7	8	2	5	3	...	...	...	...	...	...	1	1	...	4	3	...	...	6	1	15
Medicine Hat	1	2	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	1	...	3
Urban	45	35	7	10	8	6	3	5	10	11	...	2	11	5	1	13	19	5	42	...	80
Rural	82	78	19	11	20	11	14	17	11	5	5	13	14	15	4	20	27	13	94	2	160
Refugee	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
Treaty Indian	29	37	...	...	...	...	...	1	5	36	...	...	5	19	...	14	17	7	25	3	65
Total	233	216	45	33	45	31	25	36	31	60	13	50	33	47	11	62	78	30	256	12	449

NON-PULMONARY ACTIVE TUBERCULOSIS

Calgary	7	9	4	1	...	2	1	1	2	...	1	...	3	1	...	2	1	...	13	...	16
Edmonton	5	6	1	...	...	2	...	3	1	1	1	1	1	1	...	1	2	...	8	...	11
Urban	5	9	2	1	1	4	2	1	1	...	...	...	1	1	...	1	2	3	...	...	14
Rural	13	14	2	2	3	3	3	6	2	1	...	4	...	1	...	4	2	2	17	2	27
Treaty Indian	1	7	...	...	...	...	...	1	...	6	...	...	...	1	...	1	2	1	4	...	8
Total	31	45	9	4	4	11	6	12	5	8	2	6	5	4	...	9	9	6	50	2	76

RUBELLA

Edmonton	240	328	96	85	78	60	68	59	29	11	14	19	15	34	24	140	367	19	18	...	568
Calgary	158	161	57	96	52	18	29	12	1	...	6	5	17	21	8	18	289	2	2	...	319
Lethbridge	5	12	1	1	3	7	2	...	...	...	2	...	1	...	2	3	11	1	...	...	17
Urban	220	242	99	53	64	65	50	16	22	21	17	27	11	17	20	115	243	15	21	...	462
Rural	483	419	102	231	80	164	133	77	55	4	8	13	14	21	57	169	489	52	25	100	902
Total	1,106	1,162	355	465	277	314	282	164	107	41	47	64	58	93	141	445	1,409	89	66	118	2,268

DIPHTHERIA CASES

Edmonton .....	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Calgary	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1
Urban	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Rural	5	9	1	5	5	1	...	...	...	...	1	...	...	1	1	...	11	1	1	...	14
Total	7	10	1	5	5	1	...	1	...	...	2	...	...	2	...	2	13	1	1	...	17

TABLE 3: COMMUNICABLE DISEASE CASES REPORTED IN 1953 BY SEX, AGE AND MONTH OF REPORTING (Continued)

	SEX		MONTHS												AGES					TOTAL		
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over		Age not stated	
DIPHTHERIA CARRIERS																						
Edmonton	1	3	...	...	...	...	...	...	2	1	...	1	...	...	...	...	...	1	...	3	4
Urban	5	2	...	...	...	...	...	2	5	...	...	...	...	...	...	...	6	...	...	1	7
Rural	3	2	2	...	3	...	...	...	...	...	...	...	...	...	...	...	4	...	...	1	5
Total	9	7	2	...	3	...	...	2	5	2	1	...	1	...	...	6	5	...	5	...	16
DYSENTERY (BACILLARY)																						
Edmonton	2	1	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	3
Calgary .....	...	2	...	...	...	...	...	...	...	...	13	...	...	...	...	...	3	2	...	...	2
Lethbridge	13	15	...	...	...	...	...	...	...	...	...	9	1	...	5	...	3	8	2	...	14
Urban	4	3	...	...	2	1	2	...	1	...	...	...	1	...	3	...	...	...	...	3	7
Rural	24	19	...	...	1	1	1	1	...	4	2	27	4	...	2	18	10	3	...	3	43
Total	43	40	...	...	3	2	5	1	2	4	19	37	5	5	5	25	20	5	24	4	83
FOOD POISONING																						
Edmonton	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Calgary .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Urban	79	1	...	...	...	79	...	...	...	...	...	1	1	...	1	1	...	...	...	79	80
Rural	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	2
Total	81	2	...	...	...	80	...	1	...	...	...	1	1	...	2	1	...	...	...	80	83
INFECTIOUS HEPATITIS																						
Calgary	4	16	...	...	...	1	2	...	...	...	...	1	2	...	...	...	1	5	1	13	...
Lethbridge	13	15	...	...	...	...	...	...	...	...	...	13	9	1	...	...	3	8	2	14	20
Urban	67	46	3	16	14	11	9	4	9	7	2	18	11	9	...	8	38	12	33	28	113	
Rural	81	64	7	3	3	3	4	4	11	24	25	22	25	14	...	11	55	16	51	22	145	
Total	165	141	15	26	17	15	15	8	20	31	41	51	39	28	...	23	106	31	111	35	306	

TABLE 3: COMMUNICABLE DISEASE CASES REPORTED IN 1958 BY SEX, AGE AND MONTH OF REPORTING (Continued)

	SEX		MONTH												AGES					Age not stated	TOTAL	
	Male	Female	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	0-1	1-4	5-14	15-19	20-over			
			PARATYPHOID FEVER "B" CASES																			
Calgary	1	3	...	...	...	...	1	...	...	...	2	1	...	...	...	...	1	1	...	...	1	4
Rural	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Total	2	3	...	...	...	...	1	...	...	...	2	1	1	...	...	...	1	2	...	2	...	5
PARATYPHOID FEVER "C" CARRIER																						
Rural .....	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
VIRAL ENCEPHALITIS (Including Encephalitis Lethargica)																						
Rural	3	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	1	1	...	...	3
UNDULANT FEVER																						
Urban	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
WHOOPING COUGH																						
Edmonton	100	133	13	12	22	16	11	37	30	16	36	13	12	15	28	79	121	1	4	...	233	
Calgary	66	75	23	10	6	1	1	12	3	16	16	14	22	17	10	40	88	1	2	...	141	
Lethbridge	54	46	17	8	4	4	7	19	...	...	11	8	6	9	8	39	43	2	1	...	100	
Urban	107	103	27	12	5	6	53	23	...	13	16	33	6	10	14	63	114	3	16	...	210	
Rural .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	327	357	80	42	37	27	72	91	33	58	79	68	46	51	60	221	366	4	10	23	684	

TABLE 4

INCIDENCE OF SOME OF THE MORE SERIOUS COMMUNICABLE DISEASES
FOR THE TEN-YEAR PERIOD, 1949 to 1958

Date	Population	Total Cases	Total Deaths	Mortality Rate per 100.000 of population
DIPHTHERIA				
1949	871,000	59	12	1.4
1950	895,000	13	1	0.1
1951	939,501	2	1	0.1
1952	970,000	11	1	0.1
1953	1,002,000	28	3	0.3
1954	1,039,000	35	2	0.2
1955	1,066,000	10	1	0.1
1956	1,123,116	19	0	0.0
1957	1,160,000	39	6	0.5
1958	1,201,000	17	2	0.2
TYPHOID FEVER				
1949	871,000	13	1	0.1
1950	895,000	13	1	0.1
1951	939,501	37	0	0.0
1952	970,000	16	2	0.2
1953	1,002,000	9	1	0.1
1954	1,039,000	5	1	0.1
1955	1,066,000	8	2	0.2
1956	1,123,116	22	1	0.1
1957	1,160,000	16	2	0.2
1958	1,201,000	6	0	0.0
POLIOMYELITIS				
1949	871,000	127	9	1.0
1950	895,000	143	7	0.7
1951	939,501	84	2	0.2
1952	970,000	774	81	8.3
1953	1,002,000	1,399	109	10.9
1954	1,039,000	550	31	3.0
1955	1,066,000	244	8	0.7
1956	1,123,116	81	3	0.3
1957	1,160,000	65	6	0.5
1958	1,201,000	37	1	0.1
WHOOPIING COUGH				
1949	871,000	98	5	0.6
1950	895,000	120	3	0.3
1951	939,501	827	7	0.7
1952	970,000	1,105	8	0.8
1953	1,002,000	1,085	12	1.2
1954	1,039,000	842	7	0.7
1955	1,066,000	791	1	0.1
1956	1,123,116	547	3	0.3
1957	1,160,000	889	4	0.3
1958	1,201,000	684	2	0.2
SCARLET FEVER				
1949	871,000	865	0	0.0
1950	895,000	2,309	0	0.0
1951	939,501	2,304	6	0.6
1952	970,000	3,829*	2	0.2
1953	1,002,000	2,173*	3	0.3
1954	1,039,000	1,363*	0	0.0
1955	1,066,000	741*	1	0.1
1956	1,123,116	642*	0	0.0
1957	1,160,000	774*	1	0.1
1958	1,201,000	1,062*	0	0.0
*NOTE: Represents combined total of Scarlet Fever and Streptococcal Sore Throat.				
MEASLES				
1949	871,000	9,179	19	2.2
1950	895,000	1,538	8	0.9
1951	939,501	8,204	12	1.3
1952	970,000	3,515	7	0.7
1953	1,002,000	7,260	8	0.8
1954	1,039,000	3,769	6	0.6
1955	1,066,000	7,136	24	2.3
1956	1,123,116	2,047	2	0.2
1957	1,160,000	12,337	16	1.4
1958	1,201,000	3,383	4	0.3

HEALTH UNITS

E. S. ORFORD SMITH, M.A., M.B., B.Chir., D.P.H., D.I.H., *Director*

The Health Unit Act of 1951 enabled municipalities, with the exception of cities having a population in excess of 50,000, to group together for the purpose of providing themselves with a generalized public health service. When a Health Unit was formed in this manner, the Department undertook to pay 60 per cent of the approved costs of operation, while the remaining 40 per cent was furnished by the local contributing authorities in proportion to their population.

Health Unit Board members had repeatedly requested that the Department's financial contribution should take the form of a block grant. In consideration of these requests, a careful study of approved budgets was made with a view to determining the amount of grant which each Health Unit should receive. When the amounts required for dental services were excluded, it was found that a close correlation existed between the per capita cost of operating a Health Unit and its population. This trend was expressed by a formula which, while recognizing the greater per capita needs of small Health Units, allowed for a more equitable distribution of available funds than had previously been possible. Meanwhile, a fairly constant ratio of approximately 20 per cent was observed to exist between the cost of dental services in a Health Unit and the remainder of its operating expenses.

Based upon these findings, an amendment to the Health Unit Act was passed which provided for (1) a grant to each Health Unit for general health services at the per capita rate of \$1.45 less one cent for each thousand of population, subject to a minimum of 95 cents, and (2) an additional grant for dental services, when established, at one-fifth of the per capita rate for general health services. It was stipulated that the Health Unit, in order to qualify for each of these grants, must requisition the local contributing councils for a sum equal to at least two-thirds of the amount contributed by the Province. This legislation conferred upon Health Unit Boards the freedom to budget according to their convictions.

One new Health Unit was established during 1958, in the City of Lethbridge. This raised the total number of Health Units to twenty-one, and the total population served by Health Units to over 640,000.

The following is a list of the Health Units, with the locations of their headquarters and their populations for 1958:

Name of Health Unit	Location of Headquarters	Population
Alberta East Central	Stettler	48,852
Athabasca	Athabasca	20,793
Barons-Eureka	Coaldale	26,534
Chinook	Fort Macleod	23,298
City of Lethbridge	Lethbridge	30,323
Drumheller	Drumheller	29,079
Edson	Edson	20,473
Foothills	High River	22,295
Grande Prairie	Grande Prairie	29,471
Jasper Place	Jasper Place	15,957
Leduc-Strathcona	Edmonton	24,794
Medicine Hat	Medicine Hat	40,499
Minburn-Vermillion	Vermillion	28,686
Mount View	Calgary	43,197
North Eastern Alberta	St. Paul	29,495
Peace River	Peace River	30,823
Red Deer	Red Deer	51,464
Stony Plain-Lac Ste. Anne	Stony Plain	20,237
Sturgeon	Edmonton	47,380
Vegreville	Vegreville	31,173
Wetoka	Wetaskiwin	27,559

While the Division exercises administrative supervision over Health Units, the local management of each Health Unit is the responsibility of a local Board composed of councillors from the major contributing authorities. The Director of Local Health Services is available to assist and advise Health Unit Boards in the carrying out of their duties.

The services provided by a Health Unit include the prevention and control of communicable diseases, the local control of tuberculosis, maternal and child health program, school health service, mental hygiene program, health education program, and sanitary inspection service. A Health Unit may also provide a dental service for children up to the age of sixteen years.

The following table indicates the categories of staff and the number of each regularly employed by Health Units to implement these services during 1958, with corresponding figures for the three preceding years:

Category of Staff	1958	1957	1956	1955
Medical Officers	21	20	18	17
Dentists	3	3	1	1
Public Health Nurses	108	98	82	70
Sanitary Inspectors	28	26	24	19
Dental Assistants	3	3	1	1
Stenographer-Technicians	32	29	25	22
Secretary-Treasurers	21	20	18	17

Each Health Unit was invited to send its Chairman or one other member of the Board, its Medical Officer of Health, and its Secretary-Treasurer to attend the annual Health Unit Conference, which was held in the Department early in November. Representations were made by Board members for an improvement in the block grant system already described, which appeared to have caused hardship to Health Units having a low population density. Board members also went on record as favouring a standard uniform for Public Health Nurses. A wide range of subjects was discussed by the Medical Officers of Health, including immunization schedules, certain aspects of the Communicable Disease Regulations, the notification of births and deaths, and problems relating to the control of sanitation.

PUBLIC HEALTH NURSING

DOROTHY MCPHAIL, B.Sc., R.N., *Director*

JANET C. BAILEY, R.N., P.H.N., *Acting Director*

Throughout 1958 the employment and counselling of nursing personnel were major functions carried on by this Branch. There was a prevailing trend for nurses to change positions frequently and to seek employment in or close to large centres. With the development of roads, greater availability of medical care and the establishment of organized health units, the need for municipal nursing service in many areas has declined. In each area where a municipal nurse is maintained, her public health work is under the direction of the health unit in which she is located; she also participates in health unit staff meetings.

On December 31st, 1958, there were nine municipal nursing services vacant. During the year many others were without staff for varying periods of time. There were ten resignations, five appointments and three transfers within the nursing service. In some areas the municipal nursing service has been maintained by the provision of improved living accommodation, which was made possible by the co-operation of the Department of Municipal Affairs. New cottages have been erected in several places, and major alterations have been carried out on some older buildings.

Field Trips

Field trips were made by the Director or Acting Director to nineteen municipal nursing areas and thirteen health units. On occasion it was necessary to make repeat visits to several centres. Fourteen meetings were held with municipal nursing committees, mostly in the northern part of the Province.

New Districts

A municipal nursing service was opened at La Crete in October. This area is located twenty-six miles south of Fort Vermilion and serves a very widespread rural population.

The Tangent Municipal Nursing Service headquarters was transferred to nearby Eaglesham, which is now the larger centre. This was done following a plebiscite taken by the Department of Municipal Affairs.

Continuing Education

The Annual Spring Meeting of the Municipal Nurses was held in May in the conference room of the Administration Building. An invitation to attend was extended to the senior nurses of all health units and representatives of other public health agencies in Calgary and Edmonton. The chief guest speakers were Miss Esther J. Robertson, Nursing Consultant, Child and Maternal Health Division of the Department of National Health and Welfare, and members of the Faculties of Medicine and Dentistry, University of Alberta.

The statistical records attached to this report indicate the work accomplished by the municipal nurses throughout the Province.

NUMBER AND TYPES OF CALLS—30 MUNICIPAL NURSING DISTRICTS

(22 I.D.'s)

(8 M.D.'s)

Number Treatment Consultations	24,936
Number Treatment Consultations Public Welfare Cases	1,126
Number Treatment Consultations Treaty Indians	423
Number Miscellaneous P. H. Consultations	11,510
Number Antepartum Consultations	1,302
Number Infant and Pre-School Consultations	8,852
Number Treatment Home Visits	3,046
Number Treatment Home Visits to Public Welfare Cases	645
Number Treatment Home Visits Treaty Indians	77
Number Miscellaneous P. H. Home Visits	2,467
Number Communicable Disease Home Visits	503
Number T.B. Home Visits	416
Number V.D. Cases Found. Treatment and Home Visits	471
Number Maternal Welfare Home Visits	645
Number Infant and Pre-school P. H. Home Visits	1,302
Number Deliveries	37
Number Abortions	36
Number Cases sent to Doctor or Hospital	2,408
Number Deaths	38
Number Cases of Communicable Disease	1,304
Number Letters and Telephone Calls	10,559
Number Newspaper or Radio Publicity	129
Total Fees Collected	\$21,532.47
Cost of Drugs and Surgical Supplies	\$18,511.19

LECTURES, CLINICS, CLASSES—30 MUNICIPAL NURSING DISTRICTS

(22 I.D.'s)

(8 M.D.'s)

Number Lectures to Organizations	40
Number Films Shown	111
Number Generalized Clinics	674
Number Child Welfare Clinics	328
Number Home Nursing Classes	39
Number First Aid Classes	65

IMMUNIZATION WORK DONE AT OFFICE OR CLINICS

30 MUNICIPAL NURSING DISTRICTS

(22 I.D.'s)

(8 M.D.'s)

	Number of Doses
Number Immune Serum Globulin	146
Number Salk Vaccine	17,415
Number Diphtheria Toxoid	7,138
Number Pertussis Vaccine	5,741
Number Tetanus Toxoid	6,474
Number Smallpox Vaccine	1,878
Number Typhoid Fever Vaccine	108
Number Patch or Old Tuberculin Tests	3,268
Number Asian Flu Vaccine	61
Other Vaccines	300

SUMMARY OF SCHOOL REPORTS—30 MUNICIPAL NURSING DISTRICTS

(22 I.D.'s)

(8 M.D.'s)

Number of Visits to Schools	467
Number of Students Inspected	6,138
Classroom Talks	180
Number of Consultations with Teachers	693
Number of Consultations with Parents	485
Number of Pre-school Children Examined	81
Number of Doses of Diphtheria Toxoid	1,533
Number of Doses of Tetanus Toxoid	1,371
Number of Doses of Smallpox Vaccine	1,047
Number of Doses of Whooping Cough Vaccine	758
Number of Mantoux and Patch Tests	2,862
Number of Doses of Salk Vaccine	3,321
Number of Lectures	180
Number of Films Shown	70

HEALTH EDUCATION

C. C. EVOY, B.Sc., *Director*

The health education of the public, like all education, is an active process. People gathered together in groups must be stimulated to inquire, to study, to act for personal and community health improvement. They are not easily moved to learn what the educationist thinks they should want to know. They must sense a problem, realize the need for a solution and want to do something about it before the health educator with his various media of communication can work directly with people individually and in groups.

TOURS AND MEETINGS

Tours and meetings provide the opportunity for the health educator to confer with people, be they Home and School Association members, churchmen, teachers, sanitarians, doctors, nurses and others. This year was no exception in this respect. Many different types of meetings were arranged for as many different purposes. Some were held in schools, many in health unit offices and the balance ranged from a university office to the headquarters of a voluntary health organization. Themes varied from the courses of health education in the schools to the operation of audio visual equipment. Audiences by numbers ran from three to well over two hundred; while the territory travelled ranged from the centre of the Province to the four boundaries.

The first meeting of the year centred on the need for a film on venereal disease for high school students. Representatives from the health and education departments conferred with teachers following a preview of a recently produced film on this subject. To complement the observations and conclusions of this group two classes of high school students evaluated this film and completed a questionnaire on the requirements for content of a film on social diseases. The results of these two meetings were summarized in a brief to the Department of National Health and Welfare at its request. It is our hope that a film on venereal diseases will be produced by the Federal Government in the near future.

Each year early in January the nurses in public health training at the University of Alberta are given instruction by directors of divisions of the Department of Public Health on the health services available to Alberta citizens. Health education makes its contribution to this program of orientation through a lecture on media used in its educational services.

Along the south shore of Lesser Slave Lake is a scattered population of fishermen, woodsmen, millworkers and fur farmers. Amongst these people are many families of Metis who are em-

played in these industries yet seldom have more than a marginal standard of living. This may be due to a number of causes.

In June of this year a fact-gathering tour of the Lesser Slave Lake area was arranged with the Department of Education to ascertain if there is a health education problem; if so, what is the nature of the problem and what recommendations might be approved for a solution. During the course of the tour the nature of our visit was discussed by Mr. A. A. Aldridge from the Department of Education and myself, with Miss Gavigan, the municipal nurse at Smith, Miss Attrux, municipal nurse at Slave Lake; Miss Cogland, senior nurse for the Athabasca Health Unit; Miss Putz, municipal nurse at Kinuso; Mr. Tarney, high school principal, Slave Lake; Mr. Lupick, principal, Faust; Father J. Giguere, parish priest for the Faust area; Mrs. Sandman of High Prairie, a former teacher in Faust; and an operator of a lumber mill in Faust. General agreement was reached with those interviewed on the following points:

1. A pilot study might be developed.
2. The project might consist of four phases; only the first and third being designed for health education. First, an expanded health and citizenship course to be developed in Grades I to VI. The approach would be through enterprise or activity methods. The third phase, possibly of a kindergarten nature, would place emphasis upon group training in health and citizenship.

At the present time, an expanded program in health and citizenship is undergoing trial in the schools of the area involving teachers, parents and pupils of Grades I to VI. This project followed a teachers' institute at which a program of activities was outlined and discussed by the local superintendent of schools, the Supervisor of Guidance, Department of Education and the Director of Health Education, Department of Public Health. Emphasis is being placed on greater participation in healthful activities in the home, the school and the community designed to awaken the interest, arouse the curiosity and develop the responsibility children should have in health and citizenship. Progress reports have been received from the teachers and the school superintendent. The interest shown in implementing the program indicates a response which exceeds our first wave of enthusiasm. It is evident that a continuation of this experiment will be approved for a second and third term.

A number of meetings was held with health unit staffs. Present at the meetings as a visitor was Mr. A. A. Aldridge, Supervisor of Guidance, Department of Education, Alberta. The purpose of each visit was threefold: to acquaint the public health personnel with the opportunities for health education activities within the school program, wherein they may participate; to show the need for a stronger liaison between health and education personnel through the media of staff meetings, institutes and incidental instruction; and to point out the need for a greater awareness of the scope of both professions.

Teachers and public health staffs are agreed that there is need for a teacher-psychologist as a member of the school health team. This person could assist the teacher in planning suitable remedial educational activities for the child who has been referred to the guidance clinic. From the administrative side, the psychologist should be attached to a health unit, but for integration of the educational program he should be a member of the teaching staff. All groups of teachers and public health personnel interviewed on this question are satisfied that the mentally retarded child needs the help of a specially trained teacher. The qualified person for this service is a teacher-psychologist who can test the child, diagnose the cause and put a remedial program into operation.

Services of the Department of Public Health were depicted in discussion and film at meetings organized locally. The latest film to be added to the library entitled "Horizons for Health" describes the provincial health services as they are today, with an occasional flash-back to the health program of forty years ago.

Schools

To assist the local health authorities with their program in health education a tour was organized by the sanitary inspector of the Alberta East Central Health Unit to visit a number of schools within the boundaries of the unit. Lessons were taught, films shown and demonstrations conducted to emphasize the need for developing proper attitudes and habits in school and community sanitation. Schools visited were Provost, Hughenden, Metiskow and Czar.

Meetings were arranged by the Supervisor of Guidance, Department of Education, and the Director of Health Education, to convene with junior and senior high school teachers of health at Red Deer, Drumheller, Morin, High River, Pincher Creek, Blairmore, Lethbridge, Coaldale and Medicine Hat. At each centre a demonstration of displays was set up. The displays consisted of samples of health education literature, lists of films and a classification of material suitable for teaching the health units in Grades VII to X inclusive. Discussion centred around the use of health education materials in the school curriculum.

WORKSHOPS

The workshop approach for teaching people how to do something is psychologically sound. Public health personnel interested in the use of audio-visual equipment are best taught in a class situation. A period of instruction on the function and use of equipment is followed by one of application. This is sound teaching procedure. Staff members of health units profit through in-service training of this nature.

Having learned how to operate a 16mm. sound projector and to diagnose operation difficulties, a logical transition in the workshop program is the study and demonstration of steps in the presentation of a film to an audience of children or adults. Observation of methodology creates opportunity for lively enlighten-

ing discussion with respect to reasoning advanced for acceptable procedure. Classroom situation and environment make the learning experience more realistic and impressive. The culmination of the project consists in a class demonstration of the use of visual equipment coordinated with the presentation of a film.

The evaluation of such training is determined through field testing of methods learned and demonstrations observed. Repeat exercises in educational procedure and demonstration of equipment operation are invaluable and recommended.

Three film utilization workshops were conducted this year.

CONVENTIONS

A new set of nine three-panel displays showing health education literature and lists of films provided free to schools of the Province was prepared for fall convention time. Each display was designed to provide information to teachers of health in the junior and senior high school grades. The educational aids in health for each unit of the curriculum are organized for convenience and simplicity of transcription. An order form correlated to the display listing all the pamphlet material classified by grade and unit is available to each teacher of health.

The regular display group on literature and films was presented to teachers at four conventions during the fall of the year. Health unit staff members and an educationist from Health Education Services served as attendants for the exhibit at each convention. Teacher interest was high and completed order forms continue to be received daily. This form of educational medium is effective in keeping the school up to date with health education literature, advances in medical science and government health services in Alberta. Children are made aware of proper health habits and attitudes necessary to a continuing and progressive program in community health. These truths taught in the health program of the school today should form a basis for tomorrow's planning.

The Canadian Public Health Association held its annual convention in Vancouver this year. The section on health education had joint sessions with the Western Branch of the American Public Health Association. High on the list of discussion topics from the standpoint of interest value and function was the theme "The Relationship Between Public Health Education and School Health Education." A representative from Health Education Services, Alberta, attended the convention.

CONFERENCES

The Department of National Health and Welfare invited the director of Health Education Services to represent Alberta at the Seventh Biennial Federal Provincial Conference on Health Education October 1-3. The Conference was held in Ottawa with registered attendance from all ten provinces and the Federal department. The Alberta delegate gave a paper entitled "Health Education in the Schools".

On May 26 the director of health education spoke at the Public Health Nurses' Conference. The subject assigned was "The Nurses' Role in Health Education in the School".

DISPLAYS AND EXHIBITS

A number of new displays were prepared this year. Two were designed for use in dental health education: a flannel board was placed in service for convention and conference workers; to make more functional the school health program a number of three-panel exhibits was put into circulation. In an across-the-province tour these unit displays have been viewed by hundreds of teachers.

For the Edmonton Exhibition this division had prepared an exhibit designed to highlight the new government service for persons up to eighteen years of age who are affected with rheumatic fever.

Two themes were featured by this division at the Edmonton Exhibition. A central dental health display of National Health and Welfare origin was strengthened and enhanced by two side-lights on "Ten Little People and Their Teeth" and "Good Habits for Good Teeth".

The projectograph screen showed a series of slides of provincial health services followed by a story in captions on the need for immunization.

A three-panel illuminated display on Adolescence was prepared for use at the Alberta Federation of Home and School Associations convention. Health and personal development was the theme of the exhibit which carried in addition to its message, a list of films and literature on the subject available from this division.

School health display panels on health teaching units from the curriculum guide for junior and senior high schools were exhibited at a number of teachers' conventions. Reference materials in books, pamphlets and films for teacher and pupils are demonstrated and listed on each display.

EXTENSION ACTIVITIES

What percentage of the provincial population receives health education from this department directly would be pure conjecture, but some indication of the areas of penetration is given here and under other headings in this report.

Indirect health education contacts which may reflect a change in attitude and habit are effected through local organizations, particularly the Home and School Associations, women's groups, teachers' institutes and specialized groups.

The Federation of Home and School Associations' request for a health literature display at their annual convention gives opportunity for variety and ingenuity in placing an exhibit of some educational scope before representatives from all parts of the province. The delegates thus contacted by this division serve as

ambassadors to their communities and as direct outlets for health materials of local interest. A corollary to this is an organized health display on view periodically at regular home and school meetings. Display racks have been set up by local executives to bring the literature to the forefront and focus attention on current health topics.

Health staff members have been invited to teachers' institutes to present a topic on health to members of the profession. Materials for supplementary use to the speaker are supplied from this division. These may include resource material for reference, films, displays and samples of health literature.

Food-handling courses for restaurant employees conducted by health departments rural and urban have made use of resource materials from health education services. Included are four prepared lectures, a flip chart to illustrate the lectures, films, filmstrips, posters and pamphlets.

For use in a National Health and Welfare magazine a series of pictures was taken of one of Alberta's newer health unit buildings. The story of a health unit service is to be told by word and picture.

HEALTH LITERATURE DISTRIBUTION

Throughout the year day in day out people are asking for pamphlets, booklets, posters, articles and books on health topics to be used for self-edification, group-teaching, in-service instruction, reports, talks and many other purposes. Since this division is the storehouse and supply depot for much of this material the healthy demand for these pieces of information is indicative of a better general attitude toward health information.

Interest in child care and development subject matter is strongest. Schools request the greatest quantities of educational aids. Second to these are the local Health Units. On the other hand Home and School Associations have seasonal requests which indicate a continued interest in the field of health education.

New publications are prepared as the need arises; federal materials are reviewed and if approved placed into circulation; health literature from voluntary organizations is screened and made available to all interested. From the three sources a total of 275 different publications are distributed free within the province.

FILM LIBRARY

During 1955 a film entitled "Your Health Unit" was produced and placed in our library. Only two copies were purchased but the demand was so great that two more had to be obtained. Similarly in 1958 a film depicting the services of the Department of Public Health, entitled "Horizons for Health" was produced and four copies placed in the library. This film is in color, thirty minutes in length and uses a narrative type of approach. There is some background information describing the health department in years gone by, but we are quickly brought up-to-date

and given a view of the work responsibilities of the various divisions of the department. "Horizons for Health" will fill a long-felt need in the province for a film on the services provided by the Alberta Department of Public Health.

The library at present contains over 400 titles. This total includes both films and filmstrips. The number of films in the library is an always changing picture as prints which are badly worn or damaged are withdrawn while others are purchased and placed in the library. Thirty-four new titles were added during 1958.

Catalogues, newsletters and advertisements come into the division office throughout the year, listing new films on health. Films likely to be of value in our library are brought in for preview. A carefully chosen committee whose interests and professional training give them background knowledge is asked to attend these screenings and make its recommendations. Forty-two films were brought in and previewed in this manner during 1958. Out of the total number of films recommended for purchase only about 45 per cent are new titles, since worn-out and damaged films have to be replaced, and extra copies of popular films obtained. The purchase of films is limited by a fairly fixed budget.

There is an ever increasing demand for films in schools, health units, and associations interested in health education. Through the use of films the health program in the schools can be broadened considerably. Health units make use of films by giving aid to the teachers in various phases of the health program and by giving talks supplemented through the showing of films to local organizations. Associations and organizations such as the Alberta Federation of Home and School, the Canadian Mental Health Association, Schools of Nursing and church organizations request films throughout the year to supplement talks and to assist study groups in health education.

NUTRITION SERVICES

ELVA M. PERDUE, B.Sc. (H.EC.), B.Ed., *Nutritionist*

During 1958 Nutrition Services program was carried on under the direction of the Division of Local Health Services and continued to operate with a nutritionist and the part-time services of a stenographer. A direct nutrition service has been offered in certain situations but due to an expanding program the service again tended toward a consultant service.

As in other years, the public health nutritionist served as a consultant to small institutions, public health personnel and agencies concerned directly or indirectly with nutritional problems. The work was also co-ordinated with that of other agencies similarly concerned.

NUTRITION CONSULTANT SERVICE TO INSTITUTIONS

Recognizing that good food is as important to the health and happiness of the patients in the hospital as it is to the members of the family at home, Alberta has a nutrition consultant service for the small hospitals not employing a dietitian. This is a generalized service provided by the Department's nutritionist and is supplied at the request of hospitals seeking assistance. Visits by the nutritionist are planned to include observation of food preparation and food service for at least two days as well as discussion of menus and other problems with the staff. Although untrained help and antiquated equipment are common in many hospitals, planning adequate menus seems to be the primary difficulty where there is no dietitian. Specific assistance is always given with these, and in addition 12 copies of the mimeographed release, "Institutional Supper Menus" were prepared and distributed this year.

Other services to municipal hospitals have included assistance in the following aspects of institutional nutrition: in-service training of kitchen personnel, the planning of special diets, routine for reporting patients on special diets, securing of standardized quantity recipes. Requests have also come from larger hospitals for information on low sodium diets as well as films and reference materials for in-service training of dietary staff.

Four institutions were visited by the nutritionist during 1958, requiring a combined total of 30 days of observation alone. Included were a mental hospital, municipal hospitals and private hospitals. In addition to numerous telephone calls, the nutritionist also received requests from 14 hospitals for assistance and information which was forwarded by letter as quickly as staff and time permitted.

After each visit to a hospital a detailed written report is prepared and a copy is sent to the hospital administrator. Reports are prepared to show findings, recommendations and accomplishments. Follow-up visits are made to those hospitals requesting additional service.

NUTRITION CONSULTANT SERVICE TO PUBLIC HEALTH PERSONNEL

Consultant service is available to public health nurses relative to the nutrition programs in their areas. The number of field visits to work with the public health nurses decreased during 1958 but there was an increase in the amount of correspondence and in the number of office and telephone calls received. As in past years the types of assistance, information, and reference material requested covered many phases of nutrition.

The nutritionist again provided in-service training and orientation for public health nurses coming on staff in an effort to make them conscious of the significant role of nutrition in the general public health program.

Twelve issues of the mimeograph release "Nutritionally Speaking" were prepared and distributed to public health nurses, industrial nurses, Victorian Order of Nurses and home economics teachers. This material is intended to keep the personnel informed of recent advances in the field of nutrition.

EDUCATIONAL SERVICES

The educational work of Nutrition Services continued in 1958 for individuals and groups in the community. Activities of the nutritionist on a province-wide basis were varied and included working with other social agencies, institutions, educational groups and individuals. Appropriate educational materials were selected and prepared for use by staff members of the Department as well as representatives of other agencies.

Specific requests for literature from both lay and professional people were answered as promptly and completely as possible. More than 35,000 pieces of printed or mimeographed materials and more than 525 posters were distributed in response to such requests during the year. In addition to this, publications sent out regularly in connection with nutrition education included reports, statistics, news releases, monthly bulletins, pamphlets and posters. Five exhibits were also prepared and displayed at group meetings.

Fourteen feeding demonstrations were carried out in schools throughout the province during the year. Using experimental animals, these are a graphic illustration of the comparative effects of a good and a poor diet and they have created a gratifying interest among both students and parents. Community interest has been further aroused through newspaper and T.V. publicity, Home and School meetings, and store window displays of completed rat experiments.

The nutritionist assisted in 1958 at the School for Nursing Aides in Edmonton with the food laboratories for the students. In the absence of a dietitian at the Provincial Mental Hospital, Ponoka, the prescribed course in nutrition was given to the student nurses by the public health nutritionist.

Since it is recognized that university students from the fields of nursing, medicine, home economics and teaching should have

an appreciation of public health nutrition, the nutritionist has made an effort through lectures, discussions or interviews to see a representative portion of these students from the University of Alberta.

MISCELLANEOUS

Again in 1958 there were an increased number of requests for assistance with planning of adequate meals for summer camps. The requests for this service began in March and continued all through the summer months.

Industrial nurses were given assistance in planning and preparing nutrition exhibits for their offices. When it was requested, they also received assistance in planning nutrition programs and nutrition publications were provided.

Library service was again made available to the public health personnel, to the small hospital staffs and in some cases to the general public through the small library maintained by Nutrition Services.

In May, the nutritionist attended the meeting of the Dominion-Provincial Nutrition Committee in Ottawa and was given time to attend the Canadian Dietetic Association Convention, the Canadian Home Economics Convention, and to spend a week visiting Nutrition Services, Division of Maternal and Child Health, Department of Health and Welfare, Fredericton, N.B. These opportunities were refreshing from a professional point of view.

ENTOMOLOGY AND VECTOR CONTROL

J. H. BROWN, B.Sc., M.Sc., F.A.P.H.A., M.R.S.H.,
Director

On January 7, 1958, the Honourable J. Donovan Ross, M.D., Minister of Health authorized the change of name of the Division to Entomology and Vector Control so that a number of biological problems related to diseases in nature communicable to man would fall within the scope of the new Division.

The Division of Entomology and Vector Control deals with insect-born diseases, and reservoirs of human infection in native small mammals, with particular attention being paid to Rocky Mountain Spotted Fever, Colorado Tick Fever, Bubonic Plague, Tularaemia, Encephalomyelitis and other less known conditions.

Other insect problems, such as fly and mosquito control, insecticides, insect infestation in food-stuffs and insect pests of institutions, fall within the work of the Division. Furthermore, a considerable amount of time is devoted to determining the distribution of insects, ticks and mites that are involved in the transmission of human diseases.

TICK SURVEY

The Rocky Mountain Spotted Fever tick, *Dermacentor andersoni* is well established in Alberta. Its known and supposed range embraces all that part of Alberta south of a line from Empress west to Calgary, and thence north and west in the foothills and mountains north to Fort St. John, B.C.

During 1958 a total of 1,107 doses of Rocky Mountain Spotted Fever vaccine were given in the Medicine Hat and Manyberries area.

A number of oil and exploration companies also secured vaccine during 1958 for the protection of their personnel working in the tick-infested areas of the province.

PLAGUE SURVEY

Two very large areas of plague infection, one centering on Hanna and the other on Brooks exist in Alberta; in both of these areas plague-infected gophers and plague-infected gopher fleas are present in large numbers.

There are 14 species of fleas in Alberta that are capable of transmitting plague from infected animals to man, fortunately most of these species are not very numerous, and in many cases their distribution is limited. In 1958 a number of fleas were collected in various areas but no positives were found, but it should be obvious that the lack of positives does not necessarily mean any decrease in the amount of infection in fleas and gophers.

FLY CONTROL

Fly Control still presents a considerable problem both in cities and small towns. However, a program of Fly Control within Health Units is being studied. From the preliminary work which was carried out in Lethbridge it appears that an effective Fly Control Program can be operated cheaply and efficiently within the framework of a Health Unit program. A considerable amount of time is being spent in collecting and compiling the necessary information, and a broad over-all plan is being developed for undertaking an experimental Fly Control Program both in a representative city Health Unit and a representative urban-rural Health Unit. In view of the great variety of chemical insecticides being now recommended and used for Fly Control, and as many of these insecticides can be injurious to human health, it is imperative that any recommended large scale Fly Control Program should be designed to present a minimum of hazard to human health with a maximum control of the house flies.

MOSQUITO CONTROL

During 1958 mosquitoes did not present a very serious problem except in the irrigation areas of southern Alberta. However they were present in sufficient numbers to constitute a nuisance at most of the summer resort areas. There is very great interest, in all parts of the province, for local mosquito programs, but unfortunately, mosquito control is usually expensive and ineffective unless a definite long range program is undertaken. When this is done with the cost being spread out over a period of years an exceptionally low cost, and a very effective, control can be had. Last year Medicine Hat entered its third year of mosquito abatement through the use of a "Tifa" fog generating machine. This program was effective in doing what it was designed to do, that is, kill the adult mosquitoes with the chemical insecticide being used as a fog.

SCHISTOSOMIASIS

Schistosome dermatitis is becoming quite a serious problem in many of the new lake areas that are being opened up. This condition is caused by the penetration of the skin by a small fork-tailed parasite (*cercariae*). In man it always follows bathing or swimming in infested lakes or ponds and is characterized by a localized area of very itchy weals.

Snails, which are the hosts for the *cercariae*, are sensitive to copper, and small quantities of it in the water will poison them. However, this same chemical is also toxic to fish and unless properly applied can have a very adverse effect on the fish population. Furthermore, there are a great number of other difficulties and dangers associated with its use, particularly in relation to cost in regard to the price of the chemical as well as to the expense involved in properly applying the chemical. Further investigational work is being planned covering the many biological features involved in *Schistosome dermatitis*.

LEECHES

Reports of the leech infestations came in from many Alberta lakes during 1958 and appropriate advice was given. It is believed that leeches will become a problem at many of the resort areas being now developed.

HARVEST ITCH

Harvest itch is a skin condition somewhat similar to scabies and is caused by mites. The mites involved are normally on such vegetation as grain and grasses and are accidentally transferred to the person of harvesters and others handling such materials. During 1958 necessary advice was given to Health Units and local practitioners.

INSECTICIDES

Vapourizers are mechanical devices for releasing the fumes of lindane and other insecticides by means of electrical heating elements. Installation regulations under the Canadian Standards Association are used to control their use in food-handling establishments.

In view of the fact that Insecticides, and Pesticides generally, are toxic materials, the Division is being very cautious in making any recommendations unless there is sufficient evidence that the materials will be used by competent persons in a proper manner. It should be a matter of great concern when it is realized that there is a vast array of "poisons" now present in every household. Unfortunately many of the "poisons" appear to be relatively harmless because the type of poisoning may cause no immediate reaction and only becomes apparent over a long period. However, the end result is usually the same.

POISON CONTROL

In March 1958 a Poison Control Advisory Committee was established by the Minister for the purpose of investigating all matters pertinent to the establishing of a Poison Control program in the province. The recommendations of this committee were that the Department of Health establish a province wide Poison Control program consisting of 2 Poison Information Centres, one in Edmonton and one in Calgary, and a small Treatment Centre in every hospital in the province. As this report was accepted it is anticipated that the program will come into force in 1959.

Q FEVER

In November, 1958 Dr. A. Somerville, Deputy Minister, arranged for a preliminary investigation into the probable occurrence of Q Fever in Alberta. This preliminary survey is a part of a Q Fever program being carried out at the Rocky Mountain Laboratory by the United States Public Health Service.

The Alberta program enlisted the aid of A. Somerville, M.D., Deputy Minister of Health; R. D. Stuart, M.D., Provincial Bacteriologist; E. E. Ballantyne, D.V.M., Provincial Veterinarian;

J. B. Linneboe, Ph.D., Dairy Bacteriologist; E. S. Orford Smith, M.B., Director, Communicable Diseases; J. H. Brown, M.Sc., Director, Entomology and Vector Control, in order to ensure the broadest possible coverage.

LABORATORY

Insect Collections. Good progress is being made in arranging the collection of insects and ticks injurious to human health.

During 1958 numerous specimens of insects from different products and places were received for identification. The insects in these samples were identified and suitable information was supplied to the person from whom the sample had been received.

The usual educational work in regard to the control of insect-borne diseases was carried out by means of radio, motion pictures, newspapers and lectures. The usual lectures to Medical Students, Public Health Nurses, Nurses-in-Training and Undergraduates were given, and in some cases, expanded.

DIVISION OF MEDICAL SERVICES

M. G. MCCALLUM, B.Sc., M.D., D.P.H., *Director*

RHEUMATIC FEVER PROPHYLACTIC PROGRAM

The Provincial Government, in 1958, implemented a preventive treatment program for children, up to eighteen years of age, who had attacks of rheumatic fever. It is known as the Rheumatic Fever Prophylactic Program and is under the direction of the Department of Public Health. Children who have had one attack of rheumatic fever are prone to have subsequent recurring attacks with possible severe heart damage and an incapacitating disability or sudden death occurring. As there are a considerable number of such cases in the province it was considered in the best interests of the patients and residents of the province to provide such cases with medication to prevent recurring attacks of rheumatic fever.

The program was activated in the spring with the first eligible recipients receiving preventive medication in June in the form of penicillin tablets. Each eligible child, on prescription from his doctor, receives 400,000 units of penicillin daily as long as the doctor considers it in the best interests of the child's health to do so. This service is available to the child under 18 years of age.

Between June 30, 1958 and December 31, 1958 there have been 494 children accepted by the Department for rheumatic fever prophylactic therapy and who consequently are regularly receiving penicillin tablets free.

Each patient's doctor provides the Department of Public Health with certain statistical data which are being recorded for analytical study purposes at a later date.

TREATMENT SERVICES FOR SOCIAL SERVICE RECIPIENTS

During 1958, as previously, persons eligible under the program for health care for Social Service Recipients received complete hospitalization at government expense without charge, except for a few minor exceptions. Beginning April 1st, 1958, hospitalization was provided through the Hospitals Division, which Division will report it, and so it will not be considered further in this report.

The treatment services provided under this program include medical and dental care, optical, and special services such as physiotherapy, podiatry, etc., and are provided subject to the approval of the Medical Services Division.

Provincial treatment services expenditures on behalf of this group amounted to \$1,056,491.80 in 1958 which was \$149,229.15 more than in 1957. The breakdown on behalf of the groups in 1957 and 1958 is shown in Table 1.

TABLE 1
EXPENDITURES FOR SOCIAL SERVICE RECIPIENTS—1957 and 1958

	1957	1958	
Medical Care	672,943.79	767,265.90	14.01% increase
Dental Care	146,480.65	161,529.66	10.27% increase
Optical and Optometric Services	87,180.96	100,384.10	15.13% increase
Other Treatment Services	2,647.25	2,124.00	19.76% decrease
TOTAL	909,262.65	1,031,303.66	

NOTE: The population served increased by 10.1%.

The average number of Social Service Recipients in the province during 1958 was 40,382, an increase of 3,762 over 1957. Excluding hospitalization, the average per capita expenditure for the group was \$26.16 in 1958 as compared to \$24.82 in 1957, or a per capita increase of \$1.34. At December 31st, 1958 the Social Service Recipient Group was comprised as follows:

TABLE 2
SOCIAL SERVICE RECIPIENTS AS OF DECEMBER 31, 1958

	Recipients	Spouse	Dependents and Children	Total
Old Age Security*	20,366	2,178	372	22,916
Old Age Assistance†	5,664	1,137	340	7,141
Blind Pension	410	130	156	696
Mother's Allowance	2,009	.....	4,810	6,819
Widow's Allowance	811	.....	2	813
Disability Pension‡	2,841	551	606	3,998
TOTAL	32,101	3,996	6,286	42,383

*Recipients of Old Age Security plus Alberta Supplementary Allowance.

†Individuals 65-70 years of age in receipt of Old Age Assistance.

‡Disability Pensioners became eligible for the same benefits as other Social Service Recipients April 1, 1958.

It will be noted that there was an increase of 5,414 over the previous year. This is accounted for to a great extent by the inclusion of the Disability Pension Group numbering 3,998, who became eligible for treatment services April 1st, 1958.

1. Medical Care for Social Service Recipients:

This service is operated by agreement between the College of Physicians and Surgeons and the Provincial Department of Public Health. The College, through its practising members, provides complete medical care for the pension group and in return receives \$1.58 $\frac{1}{3}$ per month for each eligible individual. The College looks after the disbursement of these funds to the individual practitioner who renders medical service for the pensioner.

In 1958 the province expended \$767,265.90 for medical services as compared to \$612,943.79 in 1957. This was an increase of 14.01%. A considerable part of this was due to the 3,998 Disability Pensioners added to the pension group.

The entire Social Service Recipient group utilized medical services as follows during the year April 1, 1958 to March 31, 1959:

Number treated	84,200
Office visits	78,580
House visits	24,600
Hospital visits—	
Acute	172,400
Chronic	7,500

The foregoing is only an approximation as the data were based on 9 months experience.

2. Dental Services for Social Service Recipients

This program continued unchanged from previous years with the province continuing to pay the Alberta Dental Association 33 $\frac{1}{3}$ cents each month for each eligible individual under the plan, and the Dental Association through its dentists providing routine dental care, including one-half the cost of new dentures, and excluding posterior bridge work and orthodontia, for these individuals.

This service cost the province \$161,530.66 in 1958 as compared with \$146,480.65 in 1957, an increase of \$15,049.01 or 10.27%. Administration costs to the Alberta Dental Association were \$12,836.24 or 7.9% of the total amount received from the government in payment.

Table 3 shows the utilization of dental services by the Social Service Recipient Group during the last five years.

TABLE 3
SOCIAL SERVICE RECIPIENTS UTILIZATION OF DENTAL SERVICES, 1954-1958

Type	Number of Claims					As % of Eligible				
	1954	1955	1956	1957	1958	1954	1955	1956	1957	1958
Old Age Group	2973	3442	3356	3442	3721	11.0	12.2	11.6	11.9	12.5
Mother's Allowance	2120	2387	2449	2700	2852	38.6	40.1	39.9	43.7	44.1
Blind Pension	135	158	151	149	172	22.5	25.4	24.3	23.1	24.6
Widow's Allowance	127	129	147	129	136	18.6	17.3	18.5	16.7	16.9
Disability					728					26.4
TOTAL:	5355	6116	6103	6420	7609	15.9	17.2	16.7	17.5	18.8

There were 1,189 more persons utilizing dental services in 1958 than in 1957, being 7,609 as compared to 6,420. This, however, included 728 Disability Pensioners who were not eligible for service in 1957, so for comparative purposes the differential was 461 only. As is to be expected, the greater number of claims were among the Old Age Pension and the Mother's Allowance groups with the highest percentage claims among the Mother's Allowance group. This is definitely due to the large number of children who constitute 70.6% of this group.

3. Optical Services for Social Service Recipients

A total of 7,766 accounts for eyeglasses at a cost of \$75,195.90 was approved in 1958, an increase of 17.6% over 1957. This is a 17.6% increase in glasses and a 12.5% increase in claims over 1957.

Comparative data for eligible recipients are as follows:

	Average Number of Recipients	Number of Accounts	% of Recipients Obtaining Glasses	Total Cost of Glasses	Cost per Account
1957	36,620	6,901	18.8%	\$63,949.96	\$9.27
1958	40,382	7,766	19.2%	75,195.90	9.69

The above indicates a slight increase in the relative number of Social Service Recipients receiving glasses, 19.2% compared to 18.8%, and a relative increase in costs per account.

Total payments to optometrists were \$25,188.20 for 5,021 claims, which is an increase of 8.32% in amount and 8.33% in number of claims.

Payment to the medical eye specialist is a part of the overall agreement for pensioners' medical care made with the College of Physicians and Surgeons of Alberta.

4. *Other Treatment Services*

These services include physiotherapy, nursing, podiatry and chiropractic, and are provided only on the recommendation of the patient's physician and approval by the Director of Medical Services. Expenditures for these services amounted to \$2,124.00 in 1958, a decrease of \$523.25 over 1957.

POLIOMYELITIS HOSPITALIZATION AND TREATMENT PROGRAM

Beginning April 1st, 1958 the cost of hospitalization care for poliomyelitis cases was absorbed under the Hospitalization Benefits Act and thus only the first three months of the calendar year are shown in this report.

The poliomyelitis treatment program was enlarged in certain aspects in 1958 due to a change in the regulations under The Poliomyelitis Sufferer's Act. As a result, any individual who is a resident of Alberta and suffering from the effects of poliomyelitis, is eligible for treatment under the poliomyelitis program. Prior to April 1st, 1958, any individual whose condition developed prior to the year 1939 was not eligible for these benefits. The outcome of this change was that there was a marked increase of surgical procedures and the provision of appliances with resultant increase in costs. A small part of this increase was due to expenditure for equipment for poliomyelitis care under the Home Care Program. There were six respirator cases who, as a consequence, were placed in their own homes. The cost of equipment for this program was \$9,090.00. The overall expenditures during the year 1958 for the Poliomyelitis Treatment Program (which excludes hospitalization) was \$100,298.00.

TABLE 4
POLIOMYELITIS PAYMENTS

	1958
*Isolation Hospital Care	\$ 720.00
*Post Isolation Hospital Care	99,177.05
Medical Care	57,888.25
Medical Supervision	3,064.00
Appliances and Outpatient Services	30,256.54
Home Care Program	9,090.11
	<hr/> \$200,195.95

*Three months only. Total hospitalization costs appear in the report of the Hospitals Division.

Of the total payments for medical care in hospital for poliomyelitis patients, \$13,442.00 was paid to the College of Physicians and Surgeons for medical care of 6,721 respirator days @ \$2.00

per day; \$11,899.20 was paid for medical care of 19,832 non-respirator days @ 60c per day; and \$32,547.05 was paid to surgeons on behalf of 399 operative procedures.

THE SCHOOLS FOR NURSING AIDES

The Nursing Aide education program has gradually increased in importance in the nursing field since its inception in 1946. The population of the province is growing, the number and size of hospitals is increasing, and with the government of the province playing a more important part in the provision of hospital care for its people, the need for nursing personnel has grown tremendously. Finally, with the Provincial-Federal Hospitalization Benefits program being implemented in 1958, there developed such a need for more Nursing Aides that the Department of Public Health made plans in 1957 to provide a second school. This new school was opened in Edmonton in February, 1958, with a capacity equal to the school in Calgary.

As a result of doubling the Nursing Aides School capacity there were 461 students enrolled in 1958, 224 of these in Calgary and 237 in Edmonton. The number completing the course was 250, of which 46 were from the two classes in the Edmonton School that were able to complete their course between February and December of 1958.

Since the inception of the Nursing Aide Program in 1946 the number of Aides certified has been as follows:

1946	10	1953	208
1947	41	1954	256
1948	160	1955	270
1949	117	1956	254
1950	159	1957	239
1951	247	1958	281
1952	216		

The total number of aides certified since 1946 is 2,458. Of the total certified as of December 31st, 1958, 1,285 are employed in Alberta hospitals and 291 employed in hospitals outside the province.

Approximately 52%, or 1,285, of a total of 2,458 Aides certified in the province in 13 years are still providing active nursing service in Alberta, while another 12% are in hospitals outside of Alberta.

NURSING RECRUITMENT PROGRAM

The program of Nursing Recruitment has the primary purpose of interesting enough qualified people in nursing as a career to enable Schools of Nursing, and Schools of Nursing Aides to select, educate, and graduate into the nursing field the greatest number possible. This field includes psychiatric nursing as well. The reason for carrying this recruitment through is due to the shortage of nursing personnel in the many hospitals of the province.

A Nursing Recritment Officer was employed by the Department of Public Health in 1956 to forward this program. It in actuality becomes a public relations and promotion program and

deals with the future of 17 and 18 year olds, as well as some older applicants in the Nursing Aide program.

To achieve its objectives recruitment focuses public attention on the need for nursing. It reaches out to the high schools, parent-teacher associations, and other adult groups. This is accomplished by means of the career days in the school, meetings, displays, posters, pamphlets, films, film strips, radio and television talks and by newspaper material. The Director keeps in close contact with the twelve Schools of Nursing in the province and the two Nursing Aide Schools. She also has an advisory recruitment committee to assist her in selecting methods of promoting this very essential program.

It is considered that the results of this program are excellent and it assists in keeping the Schools of Nursing and Schools for Nursing Aides filled to capacity.

THE LABORATORY AND X-RAY SCHOOL

For many years prior to 1954 the small hospitals were unable to obtain radiological or laboratory technicians, partly due to the scarcity of such individuals and partly due to the fact they could not afford such individuals, particularly where there was not enough work for a full time employee. In 1954, to help in correcting this condition the Department of Public Health, after considerable study, opened the Laboratory and X-ray School. This course of six months duration trains a single individual as a combined technician in both radiology and diagnostic laboratory. The laboratory training is restricted to clinical laboratory tests.

The course, which is of six months duration, trains the student in three months radiology and 3 months diagnostic laboratory. During 1958 there were 18 students certified in March and another 18 enrolled in October. The following table indicates the distribution of the certified technicians as of December 31st, 1958.

TABLE 5
STATISTICAL DATA—DECEMBER 31, 1958
CERTIFIED TECHNICIANS 1955-1958

Year	Certified Technicians	In Alberta Hospitals	In Hospitals Other Areas	Taken R.T. Course
1955	14	7	.....	.....
1956	12	1	4	1
1957	16	8	.....	3
1958	18	18	.....	.....
	60	34	4	4

It will be noted that as of December 31st, 1957, 30 of 40 total graduates in this course, or 71%, were active in the hospitals of Alberta, while at December 31st, 1958, there were 34 of a total of 60 graduates, or only 56.6% active.

DIVISION OF CANCER SERVICES

V. W. WRIGHT, M.D., *Director*

The three Cancer Clinics in the Province of Alberta have experienced a very busy year (1958) as the tables below will reveal.

I. Number of examinations made (Malignant and Benign) January 1 - December 31, 1958, is 19,445.

	New		Review		Total	
	1958	1957	1958	1957	1958	1957
Edmonton	2,869	2,843	8,816	8,902	11,685	11,745
Calgary	1,859	1,514	3,982	3,206	5,841	4,720
Lethbridge	569	530	1,350	1,248	1,919	1,778

It will be noted that the total number of examinations made in the Edmonton, Calgary and Lethbridge Clinics is 19,445 as compared with 18,243 in 1957; 17,060 in 1956; 14,306 in 1955; 13,026 in 1954 and 10,827 in 1953.

II. Number of examinations made where malignancy was proven 12,811 as compared with 11,838 in 1957 as shown in the following table:

	Edmonton	Calgary	Lethbridge	Total
1958	9,135	2,208	1,468	12,811
1957	8,876	1,620	1,342	11,838

	Malignant Cases Registered at Clinics	Malignant Cases not seen at Clinics	TOTAL
Edmonton	1,341*	254	1,595
Calgary	742*	80	822
Lethbridge	230*	74	304
	2,313	408	2,721

The total number of malignant cases discovered in Alberta in 1958 was 2,721.

*A few cases treated previously in other provinces are included in these totals.

III. New Malignant Cases:

	Edmonton	Calgary	Lethbridge	TOTAL
1958	1,341	742	230	2,313
1957	1,220	544	215	1,979

There were 92 cases in the Edmonton Clinic which had not been malignant on previous examinations in which malignancy was proven this year.

There were 49 cases in the Edmonton Clinic which were malignant in previous years (before 1953) and reported to the Clinic for recheck examination this year.

IV. Number of examinations made on patients which proved Benign—

	Edmonton	Calgary	Lethbridge	TOTAL
1958	2,550	3,633	451	6,634
1957	2,869	3,100	436	6,405

The X-Ray Department of the Edmonton Clinic has had a particularly busy year as shown in the following table:

Diagnostic Radiology

	No. of Films	No. of Patients	No. of Examinations
1958	19,186	4,264	5,999
1957	17,338	4,236	5,665

COMMENT:

This numerical review of Diagnostic X-Ray Department work does not include work related to reviewal of films taken outside the Clinic, sent from the country hospitals and non-standard fluoroscopic examinations. Inclusion of these would raise the total number of examinations during the year 1958 above 7,000. Beginning January 1st, 1959, complete registration of non-standard fluoroscopies and of outside films has been started.

	G.I. Exams Ba. Series	Large bowel Ba. enemas plus air contrast	Urinary Tract I.V.P.	Chest Tomograms
1958	756	435	223	174
1957	548	431	66	90

This table demonstrates the remarkable qualitative change during 1958 as expressed in the increase of:

G.I. Examinations	41%
Large Bowel Examinations	11%
Urinographies	240%
Chest Tomographies	90%

Therapeutic Radiology	1958	1957
New Patients	759	626
Patients re-treated	508	.....
Treatments given by		
Cobalt 60	10,581	7,904
X-Ray	3,745	3,005
Cobalt 60 and X-Ray	836	402
Total number of treatments	15,162	11,311
Radium Insertions, implants and moulds	212	172
Biopsies done at Clinic	47	154
Blood Counts done in Clinic Laboratory	7,044	6,024

NUMBER OF CASES SUPPLIED WITH THE FOLLOWING SERVICES

	Hospital Services		Radiation Therapy		Diagnostic X-Ray	
	1958	1957	1958	1957	1958	1957
Edmonton	484	915	1,374	626	6,001	5,674
Calgary	311	588	499	385	1,340	812
Lethbridge	59	202	137	125	417	465
	854	1,705	2,010	1,136	7,758	6,951
	Major Surgery		Exploratory Laparotomy		Breast Biopsies	
	1958	1957	1958	1957	1958	1957
Edmonton	709	566	103	108	284	230
Calgary	519	432	57	82	270	235
Lethbridge	149	117	23	21	83	88
	1,377	1,115	183	211	637	553
	Other Biopsies		Diagnostic Curettings		Encephalo- grams, etc.	
	1958	1957	1958	1957	1958	1957
Edmonton	486	475	271	245	21	11
Calgary	602	370	138	76
Lethbridge	186	164	38	27
	1,284	1,009	447	348	21	11

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	Bronchoscopy, & Oesophagoscopy		Sigmoidoscopy		Cystoscopy	
	1958	1957	1958	1957	1958	1957
Edmonton	109	102	183	226	286	220
Calgary	38	14	16	4	81	98
Lethbridge	8	4	13	9	37	26
	155	120	212	239	404	344
	Diagnostic Consultations		Laboratory Tests			
	1958	1957	1958	1957		
Edmonton	151	110	7,127	6,118		
Calgary	75	46	479	*		
Lethbridge	5	2	29	26		
	231	158	7,635	6,144		

*Included in Nursing services.

Since the opening of the Clinics in 1941 the total number of examinations made is 154,017.

DIVISION OF SOCIAL HYGIENE

P. L. RENTIERS, M.D., *Director*

There have been few changes during 1958 within the Division of Social Hygiene either in plan of operation or personnel. The Division continues to operate full-time clinics at Edmonton, Calgary and Lethbridge under the supervision of part-time physicians and staffed by full-time qualified nurses. The physician in charge of the Edmonton clinic is also the Director for the entire Division. Edmonton remains the head office for the Division with adequate staff to maintain a central registry for the entire province as well as for the western portion of the North West Territories. The agreement whereby the Division keeps records for all venereal disease cases occurring in this section of the North West Territories was arrived at following a meeting of members of the Indian and Northern Health Services and the Director of Social Hygiene. This service, while not adding unduly to the work of the Division, has been of assistance to Indian and Northern Health Services, who would otherwise have had to set up their own central bureau, and the case load from the Territories for the present would not appear to warrant such a procedure. Our Division, on the other hand, has been afforded a better over-all picture and has been aided in its epidemiological work. All new inmates to the Provincial Gaols continue to be examined for venereal infection and are treated as necessary under direction of the Edmonton and Lethbridge clinics.

In the latter part of 1957 the Division was able to acquire the services of a male registered nurse who was put in charge of the mobile clinic. This change has proved during 1958 to have greatly increased the value of our mobile facilities which are now used on a year round basis. The clinic operates particularly, although not entirely, in the northern half of the province. In November of 1957 the Director of the Division met with the Medical Officers from the Health Units in an effort to determine what role the Units could best play in assisting with the province's venereal disease control program. Following discussions it was decided that the Division would utilize the services of the Health Unit personnel in the epidemiological field in order to expedite case finding in the various communities. The actual treatment of cases was to be left in the hands of the local practitioners. This arrangement has proved entirely satisfactory and has in no way interfered with the good relations existing between the Medical Officers of Health and the private physicians in their Units.

The incidence of all venereal disease in the province has shown an increase from the previous year. Of particular interest is the rise in infectious syphilis (primary and secondary). A total of 50 cases were reported in 1958 as compared to 25 in 1957, an increase in rate from 1.9 to 4.1 per 100,000 population. This may be attributed mainly to four localized epidemics which resulted in multiple new cases from four sources and which rapidly subsided once the sources were ascertained and brought under

control. We do not feel that there has been a general rise throughout the province. It will also be noted that late and latent cases have shown an increase. This is due principally to the work of the mobile clinic which accounted for a total of 42 new cases being brought to light. These cases would in all likelihood never have been discovered had it not been for the numerous forays into previously unexplored territories. We remain convinced that the mobile unit represents a major advance in the control of venereal disease in this province. In the 1957 report it was mentioned that 29.9% of all venereal disease reported existed in the Indian and Halfbreed population, which makes up approximately 4.5% of the total population of the province. The figures for this year have raised the previous estimate to 41.1%. There is no doubt that the increase in this figure is largely due to the fact that the mobile clinic has been working almost exclusively in the various Indian and Halfbreed settlements. It is felt that if we are to further reduce the incidence of syphilis in this province a most active program will have to be maintained amongst this segment of our population.

Routine blood testing wherever possible is still regarded by this Division as an excellent case-finding method. A total of 59.9% of all new cases of syphilis in the year 1958 were discovered on just such routine measures as the premarital test, hospital admission examination, prenatal examination, and mass surveys. It is heartening to note that no early congenital syphilis was reported in 1958, although there were three cases of late congenital syphilis, these ranging in age from fifteen to twenty-five years. A rather disturbing fact is that 11.7% of all new syphilitic cases were in people eighteen years and under.

Although there were some 300 more cases of gonorrhoea reported in 1958, the rate was 209.0 per 100,000 population as compared to 215.4 in 1957.

It will be noted that two cases of chancroid were reported this year. This does not constitute a problem.

We would be remiss if we did not acknowledge the splendid cooperation received from the Ontario Department of Health and the Federal Laboratories in Ottawa, who continue to accept specimens of blood sent to them for the *Treponema Pallidum* Immobilization Test. This test has proved valuable in the recognition of certain cases of syphilis. We also acknowledge the work done in Alberta on specimens submitted for routine serological tests, culture and smear examinations by the Provincial Laboratory. Our thanks as well to all the members of the Health Units who this year have greatly helped our efforts, the Municipal Nurses, the Royal Canadian Mounted Police, the City Police Departments, and all others who have given us their assistance.

The statistical report of the Division is as follows:

ALLEGED SOURCES OF VENEREAL INFECTION OR CONTACTS

For the Period January 1st, 1958 to December 31, 1958

Location of Source of Infection or Contact	Number of Sources of Infection or Contacts Reported	Number of Sources of Infection or Contacts Located	Percentage of Sources of Infection or Contacts Located
Edmonton and District	1310	1193	91%
Calgary and District	383	352	95%
Lethbridge and District	76	62	81%
Remainder of Province	733	653	89%
ALBERTA TOTALS	2502	2260	90%
Sources of Infection or Contacts reported outside of the Province of Alberta	136	56	41%
TOTAL	2638	2316	88%
Sources of Infection or Contacts reported from Northwest Territories	147	141	96%
TOTALS	2785	2457	88%

Unit Forwarding Information	Number of Sources of Infection or Contacts Reported	Number of Sources of Infection or Contacts Located	Percentage of Sources of Infection or Contacts Located
Armed Forces	149	121	81%
Private Doctors and Provincial Clinics	2475	2240	95%
Other Provinces	161	96	60%
TOTALS	2785	2457	88%

Sources of Infection in Alberta who could not be located by Authorities Concerned	221
Sources of Infection Outside of Alberta who could not be located by Authorities concerned	25
Number of Notification Cards (N.H. 1) with no information for contact finding	381

DETAILS OF INFORMATION ON THE FACILITATION PROCESS

How Informant Met Source of Infection or Contact			Where Informant Met Source of Infection or Contact		
Pick-ups	914	32%	Boarding House or		
Introduction	54	2%	Rooming House	11	.3%
Friend	130	5%	Apartment	1	.4%
Marital Partner	354	13%	Restaurant or Beer Parlor	176	6%
Common-law Wife	173	6%	Dance Hall	45	2%
House of Prostitution	0	0%	Street or Outdoors	97	3%
Casual Acquaintance	19	1%	Friend or Private House	184	7%
Appointment	5	.1%	Hotel	65	2%
No Data Available	1136	41%	Marital Partner	354	13%
			Recreation or Private Party	49	2%
			Train, Bus Depot or Airport	6	.2%
			House of Prostitution	0	0%
			Taxi or Taxi Office	4	.1%
			General Store or Vendors	3	.1%
			At Work	4	.1%
			No Data Available	1786	64%

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DETAILS OF INFORMATION OBTAINED ON THE CONTACT INVESTIGATION

Place of Exposure			Occupation or Source of Infection or Contact		
Rooming House	104	3%	Waitress, Waiter or		
Apartment	11	.3%	Bartender	117	4%
Private House	281	11%	Housewife	59	2%
Tent or Outdoors	78	3%	Prostitute or Street Walker ..	49	2%
Car or Truck	254	9%	Domestic, Hotel or Hospital		
Train, Motel or Trailer	41	1%	Maid	68	2%
Hotel	285	10%	Clerk, Salesman, Steno.		
Room, House or Shack	506	19%	Teacher or Cashier	62	2%
House of Prostitution	0	0%	Factory or Plant Worker ..	3	.1%
No Data Available	1225	44%	Entertainer	2	.7%
			Service Personnel	14	.5%
			Unemployed	44	1.5%
			Laundress or Dry Cleaners	3	.1%
			Truck, Taxi or Bus Driver..	25	.8%
			Farmer, Trapper or		
			Fisherman	21	.7%
			Nurse, Nurses' Aide or		
			Orderly	15	.5%
			Lab. Assistant	2	.7%
			Dressmaker or Hairdresser	12	.4%
			Laborer or Transient	64	2%
			Business man or Business		
			Woman	6	.2%
			Tradesman, Mechanic or		
			Plumber	43	1.5%
			Student, Usherette or		
			Bell Boy	17	.6%
			Surveyor	1	.4%
			Fireman or Trainman	2	.7%
			Construction Worker or Oil		
			Worker	4	.1%
			Switchboard or Telephone		
			Operator	9	.3%
			No Data Available	2143	77%

PROVINCIAL CLINIC, Alberta Jasper Building, 9815 Jasper Avenue, Edmonton, Alberta
 Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms).....	42	56	656	288	.....	.....	1042
Syphilis—													
Acquired—Primary	1	.....	9	.....	.....	.....	10
Acquired—Secondary	4	2	.....	.....	6
Acquired—Latent	9	5	.....	.....	14
Acquired—Tertiary	1	.....	.....	.....	1
(Neurosyphilis)													
Total	43	56	679	295	.....	.....	1073

Number of Cases of Syphilis—Male 24, Female 7	31
Number of Cases of Gonorrhoea—Male 698, Female 344	1042
Number and results of Serological Tests for Syphilis: 9,032 of which 348 were positive.	
Number and results of Darkfield examinations: 33 of which 6 were positive.	
Number and results of Cerebrospinal Fluid Tests: 8 of which 0 were positive.	
Number and results of Bacteriological tests for gonococci: 3,652 of which 861 were positive.	
Number and results of Cultures taken for gonococci: 2,306 of which 458 were positive.	
Total Number of Patient Visits	21,005
Total Number of New Admissions	1,179
Total Number of Old Infections for Follow-up first time in Current Year—	
Syphilis	101
Gonorrhoea	59

PROVINCIAL CLINIC, Alberta Office Building, 134 8th Avenue, S.E., Calgary, Alberta.

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms).....	1	18	43	380	198	.....	640
Syphilis (Congenital).....	1	.....	.....	1
Acquired—Primary.....	1	.....	3	.....	.....	.....	4
Acquired—Secondary.....	1	2	.....	.....	3
Acquired—Tertiary.....	2	.....	.....	.....	2
(Neurosyphilis).....
Type Undetermined.....	1	1	.....	.....	2
Totals.....	1	19	43	387	202	.....	652

Number of Cases of Syphilis: Male 8, Female 4.....	12
Number of Cases of Gonorrhoea: Male 398, Female 242.....	640
Number and results of Serological Tests for Syphilis: 5,084 of which 171 were positive.	
Number and results of Darkfield Examinations: 25 of which 7 were positive.	
Number and results of Cerebrospinal Fluid Tests: 6 of which 0 were positive.	
Number and results of Bacteriological tests for gonococci: 2,816 of which 707 were positive.	
Number and results of Cultures taken for gonococci: 3 of which 2 were positive.	
Total number of Patient Visits.....	8,271
Total number of New Admissions.....	705
Total number of Old Infections for follow-up first time in Current Year—	
Syphilis.....	61
Gonorrhoea.....	5

PROVINCIAL CLINIC, Lethbridge Municipal Hospital, Lethbridge, Alberta

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms).....	1	1	12	2	.....	.....	16
Syphilis—
Acquired—Primary.....	1	.....	.....	.....	1
Totals.....	1	1	13	2	.....	.....	17

Number of Cases of Syphilis: Male 1, Female 0.....	1
Number of Cases of Gonorrhoea: Male 13, Female 3.....	16
Number and results of Serological Tests for Syphilis: 291 of which 5 were positive.	
Number and results of Darkfield Examinations: 4 of which 0 were positive.	
Number and results of Cerebrospinal Fluid Tests: 1 of which 0 were positive.	
Number and results of Bacteriological Tests for Gonococci: 179 of which 13 were positive.	
Number and results of Cultures taken for Gonococci: 0 of which 0 were positive.	
Total Number of Patient Visits.....	394
Total Number of New Admissions.....	17
Total Number of Old Infections for follow-up first time in Current year—	
Syphilis.....	7
Gonorrhoea.....	■

PROVINCIAL GAOL, Fort Saskatchewan, Alberta.

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms).....	2	26	10	135	.....	.....	173
Syphilis—
Acquired—Secondary.....	1	.....	.....	.....	1
Totals.....	2	26	10	136	.....	.....	174

Number of Cases of Syphilis: Male 0, Female 1.....	1
Number of Cases of Gonorrhoea: Male 12, Female 161.....	173
Number and results of Serological Tests for Syphilis: 4,362 of which 79 were positive.	
Number and results of Cerebrospinal Fluid Tests: 0 of which 0 were positive.	
Number and results of Bacteriological tests for Gonococci: 152 of which 4 were positive.	
Number and results of Cultures taken for Gonococci: 2,355 of which 231 were positive.	

DEPARTMENT OF PUBLIC HEALTH

PROVINCIAL GAOL, Lethbridge, Alberta.

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms)	1	.....	8	.....	.....	.....	9
Totals	1	.....	8	.....	.....	.....	9

Number of Cases of Syphilis: Male 0	0
Number of Cases of Gonorrhoea: Male 9	9
Number of Prisoners Admitted	3,464
Number and results of Serological Tests for Syphilis: 1,340 of which 58 were positive.	

MOBILE CLINIC—Lac La Biche, Surrounding Area, Imperial Mills, Waterways, Mc-Murray, Slave Lake Area, Peace River, Grimshaw, Wabasca and Desmarais, Hinton and Edson Districts.

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Total Number of New Cases of Venereal Disease Classified as to sex and Age of Patient:													
Gonorrhoea (All Forms)
Syphilis (Congenital)	1	.....	.....	.....	.....	.....	1
Acquired—Primary	1	.....	.....	.....	.....	1
Acquired—Secondary	2	.....	.....	.....	1	.....	.....	.....	3
Acquired—Latent	1	10	12	2	.....	.....	25
Type Undetermined	1	.....	.....	.....	.....	1
Totals	2	.....	2	11	13	3	.....	.....	31

Number of Cases of Syphilis: Male 15, Female 16	31
Number of Cases of Gonorrhoea: Male 0, Female 0	0
Number and results of Serological Tests for Syphilis: 1,391 of which 103 were positive.	
Number and results of Cerebrospinal Fluid Test: 3 of which 0 were positive.	
Number and results of Bacteriological Tests for Gonococci: 6 of which 0 were positive.	
Total Number of Patient Visits	185
Total Number of Treatments Given	458

PRIVATE PHYSICIANS REPORTING CASES

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms)	1	.....	5	37	33	333	52	29	14	504
Syphilis (Congenital)	1	.....	.....	.....	.....	1
Acquired—Primary	2	.....	7	2	.....	1	12
Acquired—Secondary	3	4	.....	1	8
Acquired—Latent	1	1	18	19	1	.....	40
Acquired—Tertiary (Cardiovascular)	3	1	1	.....	5
Acquired—Tertiary (Neurosyphilis)	11	2	1	.....	14
Type Undetermined	1	1	1	.....	.....	1	4
Totals	1	.....	5	41	36	376	80	33	16	588

Number of Cases of Syphilis: Male 51, Female 33	84
Number of Cases of Gonorrhoea: Male 399, Female 105	504
Number of Doctors in the Province receiving Consultative Service: 114.	
Number of Vials of Penicillin distributed to Private Physicians: 1,129 vials (3,000,000 U. Procaine G in aqueous suspension)	
Number of tablets of Penicillin Vee Oral to Private Physicians: 18 tablets (500,000 U.)	
Number of capsules of Aureomycin to Private Physicians: 16 capsules (250 mgm per capsule)	
Number of capsules of Chloromycetin to Private Physicians: 40 capsules (250 mgm per capsule)	
Number of capsules of Terramycin to Private Physicians: 88 capsules (250 mgm per capsule)	
Number of ampoules of Neo-Arsphenamine to Private Physicians: 10 ampoules (0.45 gms. per amp.)	
Number of ampoules Mapharsen to Private Physicians: 10 ampoules (.04 gms. per amp.)	
Number of tablets Solusulfa to Private Physicians: 12 tablets (0.5 gms.)	
Number of bottles of Metimyd to Private Physicians: 1 bottle (5 c.c. per bottle)	

NEW CASES OF CHANCROID, SYPHILIS AND GONORRHOEA REPORTED
IN ALBERTA—1958

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Chancroid									2				2
Gonorrhoea (All Forms)				1		6	146	159	1511	676	30	14	2543
Syphilis (Congenital)							1	1		1			3
Acquired—Primary							4		21	2		1	28
Acquired—Secondary				2					9	10	1		22
Acquired—Latent							2	11	40	26	1		80
Acquired—Tertiary (Cardiovascular)									3	1	1		5
Acquired—Tertiary (Neurosyphilis)									14	2	1		17
Type Undetermined							1	2	2	1		1	7
Totals				3		6	154	173	1602	719	34	16	2707

Total Number of Cases of Chancroid: Male 2, Female 0 2
 Total Number of Cases of Syphilis: Male 101, Female 61 162
 Total Number of Cases of Gonorrhoea: Male 1,687, Female 856 2,543
 Syphilis Infections—19.7% were named
 Sources and/or Contacts
 Gonorrhoea Infections—14.1% were named
 Sources and/or Contacts

NEW CASES OF SYPHILIS AND GONORRHOEA REPORTED IN NORTHWEST
TERRITORIES—1958

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 Yr.		1-4 Yrs.		5-14 Yrs.		15-19 Yrs.		20 Yrs. & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (All Forms)							8	5	65	22	5		105
Totals							8	5	65	22	5		105

Number of Cases of Syphilis: Male 0, Female 0 0
 Number of Cases of Gonorrhoea: Male 78, Female 27 105

TOTAL NUMBER OF CASES REPORTED BY VARIOUS CLINICS OF THE DIVISION OF
SOCIAL HYGIENE

Sex	Syphilis	Gonorrhoea	Totals
Male	48	1,130	1,178
Female	28	750	778
Totals	76	1,880	1,956

CASES REPORTED BY DOCTORS AND MILITARY AUTHORITIES

	Private Physicians	Armed Forces	Total
Chancroid	0	2	2
Syphilis	84	2	86
Gonorrhoea	504	159	663
Totals	588	163	751

Total Number of Cases of Chancroid Reported in Alberta 2
 Total Number of Cases of Syphilis Reported in Alberta 162
 Total Number of Cases of Gonorrhoea Reported in Alberta 2,543
 2,707

Total Number of Cases of Chancroid Reported in Alberta exclusive of Armed Personnel 0
 Total Number of Cases of Syphilis Reported in Alberta exclusive of Armed Personnel 160
 Total Number of Cases of Gonorrhoea Reported in Alberta exclusive of Armed Personnel 2,384
 2,544

REPORT OF THE PROVINCIAL LABORATORIES

R. D. STUART, M.D., *Director*

During 1958 the Provincial Laboratories carried out 526,510 examinations, an increase of 82,065 over 1957. This increase is slightly over-emphasized by the conversion in this year's report of certain histopathology figures from specimens to examinations, but even after allowing for this, the figures for 1958 indicate an increase in examinations of about 16% in the Edmonton laboratory and about 12% in the Calgary laboratory. High percentage increases in both laboratories were recorded in diagnostic cytology for cancer cells, mycology, miscellaneous diagnostic bacteriology, and in water examinations.

SPECIAL TRENDS

Completion of the new wing to the Edmonton laboratory, with its promise of expanded facilities, is still awaited, but only a small amount of internal work remains to be done. These expanded facilities should be of great assistance in dealing with the considerable increase in hospital diagnostic work which must be anticipated under the new Federal-Provincial hospital agreement. This also emphasizes the desirability of relocating the Calgary laboratory in the city area, where it can contribute more adequately to the Provincial hospital diagnostic service. Although the new laboratory wing in Edmonton is still unavailable for full occupancy, a portion of its space has already been used to extend the training facilities offered to technical workers from various hospital laboratories. The serious shortage of qualified laboratory personnel is a continuing problem in the provision of adequate diagnostic facilities throughout the Province. This is being tackled in combination with the University, certain large hospitals in the Province, and the Provincial Department of Public Health. A special course leading to a B.Sc. degree in Medical Laboratory Science has been developed and the Provincial Laboratory in Edmonton will take a considerable part in providing ancillary technical training.

NEW OR SUPPLEMENTARY SERVICES

Under this heading may now be listed the distribution of skin test antigens for the diagnosis of histoplasmosis, coccidioidomycosis and blastomycosis. This was begun tentatively in 1956, but has now been accepted as a necessary regular service. These antigens are not available locally on short notice but can be conveniently stocked and distributed from the Provincial Laboratory. Thirty-five skin test sets have been distributed since the inception of this service and their use had led to the diagnosis of two cases of arrested histoplasmosis with pulmonary calcification, one case of arrested coccidioidomycosis and one case of active systemic coccidioidomycosis. Under this heading also may come the

"control of infection" program adopted for the University Hospital. The location of the hospital immediately adjacent to the Edmonton laboratory and the availability of trained senior workers in that laboratory make this service desirable and feasible. Further, by its steady demand on our staphylococcal phage typing service, this infection control program helps to maintain the technical standards necessary to deal with the irregular but often urgent demands from other provincial hospitals for help with staphylococcal typing.

REGULAR SERVICES

Mycology

The increasing clinical interest in medical mycosis has led to dramatic increase in the diagnostic examinations carried out both in Edmonton and in Calgary. The Edmonton examinations have quadrupled in the last four years and the Calgary examinations have more than doubled in the last year alone. In Edmonton, 213 dermatophytes were isolated during 1958.

Pathology

Demands on all branches of the pathology service have shown a steady increase in both laboratories, 16,485 surgical biopsy specimens being examined in Edmonton and 5,998 in Calgary. About 5% of the tissues received in Edmonton from rural hospitals showed evidence of cancer and this percentage was almost doubled in tissues received from the University Hospital. In Calgary, Dr. Shute reports that 398 or nearly 7% of his histological specimens showed the presence of malignant disease. Examination of fluids for cancer cells has become of increasing importance in recent years. In Edmonton examinations of secretion from the cervix, sputum, bronchial washings, etc., increased from 315 in 1957 to 599 in 1958, malignant cells being identified in 24 instances this year. In Calgary, the number of examinations (686) was even higher, but the incidences of cancer was lower, although six cases of early disease were thus detected.

Important as the diagnosis of cancer may be, it should never be considered to be the main purpose of these histopathological investigations of tissues and smears. Even in the absence of any malignant process the pathologist's report is usually invaluable to the clinician as a guide in both diagnosis and treatment.

Bacteriology

Of particular interest is the continued rise in the isolation of organisms of the *Salmonella* group in both laboratories. This seems to have started about 1956 and applies particularly to organisms associated with food poisoning. The 112 isolations in Edmonton are considered especially significant because they were derived from such a large number of isolated cases or from family outbreaks and not from any large epidemic. These findings indicate a very wide distribution of such organisms within the Province and suggest increasing human contact with them. In this connection, the occurrence of four cases of *Salmonella typhimurium* infection in babies, in Red Deer, Edmonton and Edson, is

noteworthy. Bacillary dysentery also is now firmly established in the Province, *Shigella sonnei* being dominant. *Shigella boydii*, which first appeared in 1957, caused a few more cases this year.

No particular prevalence of other bacterial infections has been observed. Staphylococci continue to cause trouble in hospitals but in most areas such infections seem to be under reasonable control. Diphtheria, which was seen to be on the increase in recent years, has been less prevalent in the northern part of the province, only 19 isolations being recorded, one from a fatal case. In the south, 11 cases of diphtheria were encountered. All cases occurred sporadically and at scattered points, but indicate the need for continuing vigilance in prophylaxis as well as in diagnosis.

An interesting series of unusual infections was encountered in Edmonton. *Pasteurella multocida* is an organism commonly carried by cats, dogs and certain farm animals. In previous years rare infections with this organism have been diagnosed in both Edmonton and Calgary laboratories, but during 1958 no fewer than 10 cases were encountered in the former laboratory. Of these infections, five were in superficial wounds contaminated by dog or cat bites or licks, four were broncho-pulmonary, and one appeared in an acute suppurative appendicitis in a young farmer.

In the diagnosis of gonococcal infections the replacement of smear examinations by culture, indicated in last year's report, has continued satisfactorily. This development has reduced the amount of laboratory work per specimen and has thus allowed the same number of workers to meet an increased specimen load. The percentage of successful results has been maintained at the highest level so far achieved.

STAFF

The resignation of Professor C. R. Amies from his position as Consultant and Virologist to the Provincial Laboratory must be noted with extreme regret. Throughout his years of association with the Edmonton laboratory he had made an invaluable contribution to its services and development. Particularly is it to be regretted at a time when facilities for virus diagnosis were about to be provided in accordance with his own specifications and desires. The position of Senior Assistant Bacteriologist, vacant since the resignation of Dr. Iland in May, 1957, has now been filled by the appointment of Dr. E. J. Penikett from the Bacteriology Department of Guy's Hospital in London, England. Dr. Penikett took up his duties in the beginning of December, 1958.

TABLE 1	
EXAMINATIONS PERFORMED IN THE PROVINCIAL LABORATORIES	
Year 1958	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

CONTROL OF COMMON INFECTIONS		
	Edmonton	Calgary
Diphtheria	4,858	1,445
Enteric-Dysentery	5,965	2,281
Fungus Infections	3,392	278
Intestinal Parasites	327	98
Naso-pharyngitis	9,252	1,376
Tularaemia serology	1,688	727
Tuberculosis	12,242	2,161
Undulant Fever serology	1,850	727
Whooping Cough	26	25
OTHER DIAGNOSTIC AND MISCELLANEOUS		
Animal inoculations (other than T.B.)	141	49
Antibiotic etc. sensitivities—disc	157,002	31,814
..... tube	15	.....
Blood cultures	1,222	108
Leptospirosis	200	.....
Miscellaneous	19,921	4,507
Paul Bunnell test	1,042	334
P.M. Bacteriology	253	.....
Referred cultures	283	4
Special investigations	7,851	12
Trichomonas	7,652	327
Virus infections	306	.....
VENEREAL DISEASE CONTROL		
Chancroid etc.	5	.....
Gonorrhoea—Smears	6,902	6,111
..... Cultures	8,094	359
Syphilis	121,510	37,173
SANITARY BACTERIOLOGY		
Food Products	64	11
Milk and Cream	2,998	2,190
Water	11,616	6,480
Utensils	1	5
PATHOLOGY		
Diagnostic cytology—blood smears	194	175
..... bone marrow	203	3
..... fluids	599	686
Routine diagnostic histology	21,308	7,479
Routine diagnostic autopsies	8,069	5
Referred diagnostic histology	1,750	2
Pregnancy Diagnosis—Frog Test	728	.....
..... Rabbit Test	19	.....
TOTALS	419,558	106,952

TABLE 2
CONTROL OF ENTERIC-DYSENTERY INFECTIONS

EXAMINATIONS	Edmonton	Calgary
Blood and Clot Cultures	1,542	725
Faeces Cultures	2,292	740
Urine Cultures	19	19
Other Examinations	46	
Serological Tests	1,802	727
DETAILS OF ISOLATIONS INCLUDING REPEATS		
SALMONELLA		
S. typhi	15	
S. paratyphi B	22	1
S. typhi-murium	64	8
S. heidelberg	25	11
S. newport	12	13
S. montevideo	4	
Other Salmonellae	7	
SHIGELLA		
Shigella sonnei	132	26
Shigella flexneri	16	3
Shigella boydii	8	

TABLE 3
CONTROL OF TUBERCULOSIS

EXAMINATIONS	Edmonton		Calgary	
Microscopic	6,184		927	
(positive)	320		5	
Culture	3,867		715	
Animal inoculations	2,091		519	
SPECIMENS				
	No.	Positive	No.	Positive
Pulmonary	4,852	406	726	.....
Meningeal	79	7	27	1
Renal	826	51	328	2
Other	410	36	235	3

TABLE 4
CONTROL OF SYPHILIS

BLOODS	Edmonton		Calgary	
Examinations—Presumptive Kahn	95,498		29,082	
Standard Kahn	10,139		3,192	
Quantitative Kahn	848		147	
Wassermann (Kolmer)	13,342		3,719	
CEREBRO-SPINAL FLUIDS				
Examinations—Wassermann (Kolmer)	1,683		997	
Blood and cerebro-spinal fluid "positive" to reaction	596		129	
Blood and cerebro-spinal fluid giving reaction below lab. diagnostic level	2,013		855	
PRE-MARITAL BLOODS	12,284		8,292	
Positive to reaction	13		3	

TABLE 5
SANITARY CONTROL MILK AND CREAM

MILK AND ICE-CREAM (No. of specimens)	Edmonton	Calgary
Coliform test	1,655	1,157
Plate Count	904	530
Phosphatase	1,651	1,157
Butter fat	242	280
Milk bottles etc.	200	209
	1	7

TABLE 6
SANITARY CONTROL WATER

WATER (No. of specimens)	Edmonton	Calgary
Coliform test—Presumptive	5,536	3,127
Confirmed	5,502	1,661
Special	1,820	1,350
Plate count	279	321
Waters found bacteriologically unsuitable	4,015	3,148
	923	1,050

TABLE 7

SERA AND VACCINES DISTRIBUTED

(All supplied by Connaught Laboratories unless otherwise noted)

IMMUNIZING AGENTS

	Edmonton	Calgary
Diphtheria—Diluted Diphtheria Toxoid—1 person .....	.....	46
2½ c.c. reactors	106	.....
Schick Test Toxin—25 person	278	248
Toxoid—1 person	368	242
6 c.c.	45	136
Diphtheria Combined—Diphtheria and Pertussis—		
1 person	211	240
9 persons	15	80
Diphtheria, Pertussis and Tetanus—		
1 person	6,216	4,945
9 persons	3,250	1,390
Diphtheria and Tetanus—		
1 person	1,480	1,207
9 persons	1,012	624
Enteric—Typhoid-Paratyphoid—1 person	613	378
10 c.c.	744	136
Enteric combined—T.A.B.T.—3 c.c.	657	464
25 c.c.	133	.....
Measles—Anti-Measles—5 c.c.	780	1,223
Immune Serum Globulin—2 c.c.	1,953	.....
5 c.c.	2,082	.....
Rocky Mt. Spotted Fever (Lederle Lab.)—3 c.c.	2	7
50 c.c. ....	.....	.....
Smallpox—1 point	3,418	3,368
10 point	6,703	3,060
Staphylococcal Infection—Staphylococcus Toxoid—2 c.c.	686	420
Tetanus (see Diph. and Enteric combined)—		
Tetanus Toxoid—1 person	1,436	2,115
Whooping Cough (see Diph. combined)—		
Pertussis Vaccine—1 person	171	344
9 persons	6	63
Vaccines, other—Autogenous Vaccine (Prov. Lab.)—25 c.c.	23	31
Rabies Vaccine—14 c.c.	24	.....
Poliomyelitis Vaccine—10 c.c.	54,084	.....
Influenza Vaccine	65	.....

THERAPEUTIC AGENTS

	Edmonton	Calgary
Diphtheria—Antitoxin—1,000 units	315	176
10,000 units	39	4
20,000 units .....	.....	9
40,000 units	153	32
Gas Gangrene—Antitoxin—4,000 units (Parke, Davis Co.) .....	.....	.....
10,000 units (Connaught Lab.)	351	471
Scarlet Fever—Antitoxin—3,000 units	6	.....
Snakebite Antivenin—(John Wyeth & Bros. Ltd.)—15 c.c.	1	20
Staphylococcus—Antitoxin—10,000 units	24	40
20,000 units	1,295	2,077
Tetanus—Antitoxin—1,500 units	113	2
10,000 units .....	.....	100
20,000 units .....	.....	.....

TABLE 8

MINIMUM COMMERCIAL VALUE ASSESSED FROM RECOMMENDED
PROVINCIAL SCALES

Examination	Edmonton	Value	Calgary	Value	Total
Diphtheria	4,858	\$ 4,858	1,445	\$ 1,445	\$ 6,303.00
Enteric-dysentery	5,965	11,930	2,281	4,562	16,492.00
Fungus infections	3,392	10,176	278	834	11,010.00
Intestinal Parasites	327	327	98	98	425.00
Naso-pharyngitis	9,252	9,252	1,376	1,376	10,628.00
Tularaemia serology	1,698	849	727	364	1,213.00
Tuberculosis	12,242	24,484	2,161	4,322	28,806.00
Undulant Fever serology	1,850	925	727	369	1,294.00
Whooping Cough	26	52	25	50	102.00
Animal inoculations (other than T.B.)	141	423	49	147	570.00
Antibiotic etc. sensitivities—disc	157,002	31,400	31,814	6,353	37,763.00
..... tube	15	15	.....	.....	15.00
Blood Cultures	1,222	2,444	108	216	2,660.00
Leptospirosis	200	400	.....	.....	400.00
Miscellaneous	19,921	19,921	4,507	4,507	24,428.00
Paul Bunnell test	1,042	2,084	334	668	2,752.00
P.M. Bacteriology	253	506	.....	.....	506.00
Special Investigations	7,851	23,553	12	36	23,589.00
Referred cultures	283	566	4	8	574.00
Trichomonas	7,652	7,652	327	327	7,979.00
Virus infections	306	no charge	allocated	.....	.....
Chancroid etc.	5	10	.....	.....	10.00
Gonorrhoea—smears	6,902	6,902	6,111	6,111	13,013.00
..... cultures	8,094	8,094	359	359	8,453.00
Syphilis	121,510	243,020	37,173	74,346	317,366.00
Food Products	64	128	11	22	150.00
Milk and Cream	2,998	5,996	2,190	4,380	10,376.00
Water	11,616	23,232	6,480	12,960	36,192.00
Utensils	1	2	5	10	12.00
Diagnostic cytology—blood smears	194	388	175	350	738.00
..... bone marrow	203	406	3	6	412.00
..... fluids	599	1,197	686	2,058	3,855.00
Routine diagnostic histology	21,308	85,232	7,479	29,916	115,148.00
Routine diagnostic autopsies	8,069	32,376	5	20	32,396.00
Referred diagnostic histology	1,750	7,000	2	8	7,008.00
Pregnancy diagnosis—Frog Test	728	3,640	.....	.....	3,640.00
..... Rabbit Test	19	95	.....	.....	95.00
	<u>419,558</u>	<u>\$570,135</u>	<u>106,952</u>	<u>156,238</u>	<u>726,373.00</u>

DIVISION OF SANITARY ENGINEERING

H. L. HOGGE, B.Sc., P.Eng., *Director*

Prevention of disease by the control of environmental factors is the main function of this Division. This function is subdivided into five categories, viz., Municipal Engineering, Stream Pollution, Air Pollution Control, Sanitary Inspections, and Plumbing Inspections.

The Municipal Engineering section is concerned with the waterworks and sewerage systems in the Province. The engineering plans and estimates for the construction of new systems and extensions to existing systems, including water and sewage treatment works are reviewed and if satisfactory, approval by the Provincial Board of Health is recommended. The operation of the systems is checked by inspectional trips and also assistance in solving operational problems is given whenever requested.

Stream Pollution control work mainly consists of periodic checks of water quality in the main rivers of central and southern Alberta, and the review of waste disposal aspects of proposed new industries. The Calgary primary sewage treatment plant extensions were completed in early 1959 and the plant placed in continuous operation.

Air Pollution detection and measurement was started in 1958 with the establishment of 16 stations to measure hydrogen sulfide and sulphur dioxide by the "exposure cylinder" technique. Dust-fall and fluorides were also measured at four of these stations in one area.

Sanitary Inspection service is provided to areas of the Province not included in organized Health Units. In addition, the staff consults with Health Unit personnel on request, and in 1958 carried out two special studies, one on swimming pool operation and one on refuse disposal facilities and practises in and around the four larger cities of the Province.

Plumbing Inspection service is provided for areas not having their own local inspector. Assistance is given to local inspectors upon request and in cases of dispute regarding the ruling of a local inspector.

Details of the Division's work is as follows:

MUNICIPAL ENGINEERING

As in the past few years, much of the time spent in this field was given to plan checking both for new systems and extensions to existing systems. With the addition of one engineer to this work, more prompt service was given to the issuing of the necessary health certificates of approval.

One hundred and four different centres having waterworks and/or sewerage systems were visited this year. Some of these places were visited more than once. There are some fifteen (15) centres which have not been visited in the past three years. It is estimated that every centre in the Province having water or sewers will be visited every two or three years with the present staff available.

Many of our inspection trips in recent years have been made to places with specific problems. This year these include Vauxhall, Standard, Evansburg, Elk Point, Delia, Peace River and Stavely, all of which had water supply difficulties.

The operator's schools were again very successful. The second and third year courses were held this year and the attendance was 29 at each. To date, sixty-four centres have taken advantage of the schools. The third-year class has expressed a definite desire to hold a one or two-day school every year for those who have completed the three courses. It is hoped that this school may be held in 1960. The speakers for this school will be chosen from those in attendance and discussions guided by members of this Division.

This Division was asked to visit three sites for development by the Department of Lands and Forests. A report was written outlining possibilities for water supply and sewage disposal at each of the three sites: Three Sisters, Chilver Lake and Lower Kananaskis Lake.

Swimming pool design plans are reviewed by the Division, and in 1958 approvals recommended to the Provincial Board of Health for two new pools.

The following tables are given to show the 1958 waterworks and sewerage system construction costs.

A. *New Systems*

Provisional			Final		
	No.	Estimated Cost		No.	Estimated Cost
Water	10	\$2,462,171.00	Water	5	\$ 234,045.00
Sewer	10	1,870,897.00	Sewer	7	235,415.00
Storm Sewer	1	156,089.00	Storm Sewer	1	4,192.00
Totals	21	\$4,489,157.00	Totals	13	\$ 473,652.00

B. *Extensions to Existing Systems*

	Provisional		Final	
	No.	Estimated Cost	No.	Estimated Cost
Water Supply and Treatment	9	\$ 1,795,520.00	17	\$ 1,087,665.00
Sewage Treatment	5	227,900.00	6	753,959.00
Water Mains and Sewers	26	10,458,775.00	97	7,041,847.50
Storm Sewers	6	3,579,848.45	2	486,100.00
Totals	46	\$16,062,043.45	122	\$ 9,369,571.50

There was a marked decrease in the number of new systems installed during 1958 over the previous year. This decline is ex-

pected to continue in the future because the capital costs involved for such installations are too great for the small communities still without these systems.

Extensions to sewage treatment facilities at Lethbridge, Edmonton and Calgary during 1958 was the only item showing any extensive increase over the 1957 figures.

At the end of 1958 there were 189 public waterworks and/or sewerage systems operating in the Province. This number includes three towns in National Parks, two institutions and 12 unincorporated urban centres which serve approximately 19,000 persons. The percent of the urban population in cities, towns and villages served with a waterworks and/or sewerage system was 97.3%.

There were 170 waterworks systems and 177 sewerage systems operating in the Province at the end of 1958, serving respectively populations of 668,220 and 669,905, or 59.4% and 59.6% of the total provincial population. It is interesting to note that there are 75 communities served with water and/or sewer facilities having populations of 500 or less; also 35 which have a population of 300 or less.

All population figures are taken from the 1956 census, and these figures include the Town of Lloydminster (Alberta portion).

STREAM POLLUTION CONTROL

The basic program of making periodic checks of the water quality in the North Saskatchewan, Athabasca, Red Deer, Bow and Oldman rivers was continued in 1958. In addition waste effluents from urban municipalities and industries located adjacent to these rivers were evaluated and some special work was done to study further the oily flavor of fish in the Bow River downstream from the Calgary area.

Noteworthy is the improved quality of the North Saskatchewan River water, the dissolved oxygen content remained slightly over 3 ppm. during the winter season, subsequent to the operation of Edmonton's activated sludge plant. The taste and odor of the water was also much improved and no evidence of adverse quality was noted.

The Athabasca River now receives the effluent from a 400-ton sulfate pulp mill. Water quality deteriorates due to taste and odor immediately downstream, but dissolved oxygen depletion or suspended solids content have not been appreciable. The mill uses large settling ponds to remove suspended solids and have had to clean these out in the summer of 1958.

The Red Deer River was surveyed in the winter of 1957-58 and an order was issued to the City of Red Deer to install primary sewage treatment and provide additional control over B.O.D. release during the winter season.

At Calgary, the primary sewage treatment plant was placed in full operation in February, 1958, and has resulted in good improvement in the Bow River. Also on the Bow River, experimental

work was done to evaluate the effect of refinery effluent on the taste of "trout" fish. It was ascertained that refinery products such as lubricating oil, diesel fuel, naphtha and lab grade phenol would produce no taste in the fish. However, the effluents from all of the process units in the refinery seemed to have a similar taste to that noted in the Bow River fish.

AIR POLLUTION DETECTION

Complaints regarding odors and fumes in the vicinity of a "sulfur" plant at Pincher Creek and various oil and gas fields in the Province were investigated with the aid of some air pollutant detectors in 1958. Exposure cylinders to detect and measure the amounts of hydrogen sulfide and sulfur dioxide in the air were set out in stations at four locations in each of the following areas: Pincher Creek gas field and sulfur plant, Nevis - Erskine - Wimborne gas and oil fields, Okotoks near site of proposed sulfur plant and at Medicine Hat near a chemical fertilizer plant. At the latter location dustfall and fluorides were also included in the observations. The "cylinders" and the dustfall and fluoride collectors are analyzed in the Division's laboratory in Edmonton. The Medicine Hat and the Foothills Health Units service the stations at Medicine Hat and Okotoks respectively and forward the "exposed" units to Edmonton.

SANITARY INSPECTION

In 1958, there were positions for 58 Sanitary Inspectors in Alberta, in the Provincial Department, City Health Departments, Health Units and in the National Parks. At the year's end, there were no vacancies, though three of the positions were occupied by student Sanitary Inspectors.

For the second successive year, no compulsory milk pasteurization bylaws were passed in the Province. There are 38 such bylaws in effect in urban municipalities. At the year's end there were 81 pasteurizing plants supplying milk to the public, and a further six supplying to schools and institutions.

A review of reports of laboratory examination of samples of milk indicated that the operations of many of the plants were not always satisfactory. Frequently, successive reports indicated that adequate corrective steps were not being taken some times for several months. In view of the reliance which the public places in pasteurized milk this cannot be considered a satisfactory situation.

The proper supervision of milk supplies by local health authorities presents problems. Most pasteurizing plants now supply milk to many communities which are rarely confined to any one health unit. The distances over which milk is being transported are rapidly increasing, and thus the number of health authorities concerned in any one plant is multiplied. While it has been possible in some cases to work out some form of co-operation, duplication of responsibility is not usually satisfactory. It may be proper to consider some form of co-ordination of public health activities in the field of milk control from the provincial level.

Other departments of the Government continued to co-operate with health authorities in sanitation matters. A good example has been the policy of the Surveys Branch of the Department of Highways to refer survey plans for waste disposal grounds to the Health Department. This co-operation has made possible the inspection of the locations by the health unit concerned or by a Provincial Sanitary Inspector.

Local Boards of Health issued seven restaurant closure orders to protect public health in 1958. Eleven such orders were issued in 1957. Of the seven restaurants to which closure orders were issued three (7) carried out improvements within the seven-day waiting period and did not therefore close. Two (1) made the necessary changes after closure and were permitted to re-open. Two (3) were still closed at the year's end. (The figures in brackets are comparative figures for 1957.)

The Provincial Sanitary Inspectors continued the program of previous years designed to assist local health authorities, particularly in non-health unit areas, to deal with sanitation matters. Two special projects, one connected with swimming pools, the other with waste disposal grounds were also carried out.

In all, 926 inspections were made during the year, which is a considerable reduction from the 1,267 inspections in 1957. The year 1958 was a more normal year for the sanitation section. There was no parallel in 1958 to the special and intensive services which were provided in 1957 in the Hinton and Drayton Valley Districts. The major reductions were in the inspections of restaurants and food handling establishments from 640 to 301, and in the inspection of camps from 200 to 128. These categories were emphasized in the special services mentioned and the reductions, therefore, confirm a return to average.

During the summer months a special swimming pool survey was undertaken. This project required the major portion of one inspector's time for a period of seven weeks. The survey covered construction, equipment, water condition, sanitary facilities, general sanitation and safety. Inspections were made in the company of a representative of the Local Health Authority. A total of 43 pools in 31 communities were visited. Conditions found were rated: 5 pools very good, 5 good, 4 fair to good, 12 fair, 5 fair to poor, 10 poor and 2 very poor. From the information obtained, it has been possible to advise Local Boards of Health concerning desirable improvements. The information will also be useful in planning instruction courses for pool operators and in the planning of further inspectional activities at swimming pools.

A special survey of the operation of waste disposal grounds was also undertaken. This survey was made in view of difficulties which were affecting municipalities in endeavors to secure new locations and the complaints received from persons living in the vicinity of sites being considered. These complaints were usually based on unsightliness, odors, unpleasant smoke, fly problems, etc., created by existing "garbage dumps". The survey was limited to the waste disposal methods employed by the four larger cities and municipalities which adjoin them. This survey was carried out in the late fall and occupied one inspector for approxi-

mately three weeks. From the visits to two incinerators, one sanitary landfill, two trench and fill operations, and 13 open dumps, it appeared that incinerators and sanitary landfills were satisfactory for larger centres, that trench and fill could be reasonably satisfactory for smaller communities, and that open dumps were never satisfactory.

One hundred and twenty-six inspections were made at dairy farms and milk plants located outside health units. This may be compared with 97 such inspections in 1957.

As mentioned earlier in this report, 301 inspections were made in restaurants and food handling establishments. An experiment was made during the year in certain districts where restaurants continued to be unsatisfactory in cleanliness and maintenance items. Re-inspections were made at much shorter intervals. This program did produce results, worthwhile improvements were obtained. Whether or not these improvements will be maintained without resorting to similar activity again remains to be seen.

One hundred and twenty inspections were made in housing categories. These include tourist accommodation, trailer coach parks, and industrial and construction camps. Included are 45 inspections at logging camps. These camps housed a total of 1,078 men and were located anywhere from six to 60 miles from roads used for other than access to the camps. A variety of conditions were found; some very satisfactory, others most unsatisfactory. Bathing and laundry facilities were frequently found to be quite unsuitable or entirely absent. Twenty-seven of the camps visited were below standard in this feature. In other features, four had bunkhouses below standard, nine were below standard in toilets, four in water supply, and six in kitchen or dining-room facilities.

The number of inspections of wells, other private water supplies and private sewage disposal systems increased from 166 in 1957 to 180 in 1958. Usually these inspections were at farm homes or rural schools and were made in response to requests from users or because of unsatisfactory laboratory reports. These visits are nearly always time-consuming but appear to be worthwhile because of the opportunity to give advice to the home-owner or responsible authority to enable correction or to protect the health of those using the supply.

In summary, it may be said that the sanitation program of the Division was extremely diversified during the year. Two special projects connected with the protection of health and comfort of citizens of the Province were undertaken. An experiment to improve restaurant sanitation was also tried out. In addition and throughout the year the Provincial Sanitary Inspectors provided limited coverage of the more important matters in the field of sanitation throughout the parts of the Province not served by city health departments or health units.

PLUMBING INSPECTION

Within the past few years there has been a definite movement by urban and rural dwellers with regard to bettering their living conditions through the installation of plumbing facilities. Farm-

ers feel and desire that their homes should be as modern and up-to-date as the city dwellers' and have learned that plumbing facilities can be enjoyed through the construction of proper sewage disposal systems. This trend is reflected by the increased number of plumbing permits which have been issued and by the number of requests for information and assistance which has been received.

This office issued 259 plumbing permits at a value of \$2,760.00 during the 1958 calendar year. This indicates a substantial increase over last year.

The number of plumbing fixtures installed throughout the Province during the year totalled 70,719, which represents approximately 15 million dollars' worth of plumbing installed during 1958. The number of individual types of fixtures installed was as follows:

Water Closets	18,923	Lavatory Basins	19,816
Baths	10,718	Sinks	12,254
Laundry Tubs	2,019	Special Fixtures	6,989

The number of privies eliminated through the installation of plumbing was 1,279.

The Plumbing Inspectors of this Division devoted considerable time to various School Divisions throughout the Province, especially with regard to the installation of sewage disposal systems and to the renovation of existing systems which were not operating satisfactorily. A number of these School Divisions are now using the above-ground sewage effluent disposal system in preference to the standard weeping tile field and cesspool method as it has been found that some types of soil will not provide any percolation. Some of the larger schools use the lagoon system of sewage disposal. That system appears to be the most satisfactory but the location requirements often make it impossible to construct such a system for the use of a school.

The Extension Division of the Department of Agriculture again arranged a number of short courses throughout the Province dealing with the installation of plumbing in urban or rural dwellings. The Plumbing Inspectors lectured at these courses and found that they are extremely well received by the public, and it is obvious that an ever-increasing number of requests will be received each year for similar courses.

During 1958, the Plumbing Inspectors with this Division lectured at meetings attended by local plumbing inspectors and members of the plumbing trade in the areas involved. Such meetings provide a uniform interpretation of the Provincial Plumbing and Drainage Regulations.

It was necessary to give assistance to local plumbing inspectors and to arbitrate 18 different disputes which developed between them and plumbing contractors.

Architects and mechanical engineers are bringing their plumbing problems to our offices before construction plans are released for tender. This provides the contractor with a superior set

of plans and results in cost estimates which are very close to actual installation costs and, therefore, a saving to the owner of the building.

This office received 121 requests from farmers this year to inspect plumbing which was installed in their homes.

A number of inspections were made of plumbing and sewage disposal systems at service stations, garages and restaurants which were built along the re-routed sections of Provincial Highways Nos. 1 and 2.

In order to determine the amount of sewage which would be forthcoming from buildings of this type, it was necessary to send out a questionnaire to local authorities requesting actual water consumption figures. This information was obtained from existing buildings of this type, where a metered supply was in operation. The information obtained from the returned questionnaires was extremely valuable and assisted greatly in the design of sewage disposal systems to serve highway service stations, garages and restaurants.

SPECIAL PROJECTS

One special project — A Study of Sewage Lagoon Operation — was started in May, 1958, with the financial assistance of the Federal Health Grants.

The purpose is to investigate the chemical, bacteriological and biological action in the lagoon and to assess the efficiency of the lagoons as sewage treatment units. The lagoons studied will include those with a full year's detention time to those having only a two weeks' detention time, and also some which are constructed as a series of two or three compartments.

This study is planned to continue through to the fall of 1960 so that observations can be made during two complete cycles of seasons. The full-time staff consists of a chemical engineer and a graduate student in Bacteriology; also on a part-time basis, a Professor of the Bacteriology Department, University of Alberta, and a biologist of the Provincial Fisheries Division are participating in the study.

CIVIL SERVICE NURSE

K. E. JORGENSEN, R.N.

The responsibility of this Branch relates to the "emergency" care of civil servants on duty and immediate treatment of minor illnesses while at work or when home calls are made. We also act in an advisory capacity for the need of medical care. Certificates of illness are issued to the worthy cases.

The greatest "out of the ordinary" project for the year has been assisting in the Poliomyelitis Immunization program for civil servants. This was done along with the Municipal Nursing Division under the direction of Dr. E. S. Orford Smith, who is in charge of the Division of Communicable Diseases. Statistics on the "clinics" will be submitted by Dr. Orford Smith.

As in previous years, respiratory infections take a great lead in necessitating our home and office calls. An increasing proportion have been diagnosed by the medical profession as being virus infections.

Complete physical exhaustion has been a very common complaint this year, and in many cases with no apparent cause.

Approximately seventy-six ill or injured cases have been taken to hospital, home or to the doctor's office. It has been necessary in a few cases to call an ambulance.

The number of telephone calls received annually with regards to regulations and illnesses would be well in the hundreds, but no record is kept.

We would like to express our sincere thanks to the various Departments and the members who are appointed to assist in cases of emergency in the various buildings.

The following report will show the monthly figures for 1957 and 1958.

	Office Calls	Home Calls	Compensation	Certificates
January	462	45	16	37
February	482	62	15	32
March	408	36	12	27
April	462	32	17	12
May	481	29	19	24
June	441	30	20	14
July	401	32	15	11
August	290	16	10	6
September	400	23	11	14
October	483	30	13	19
November	445	47	6	21
December	476	49	12	29
1958	5,231	431	166	246
1957	5,576	652	155	393

DIVISION OF ARTHRITIS SERVICES

R. K. THOMSON, M.D., *Director*

There has been no change in policy during the year 1958. The Division of Arthritis, Department of Public Health, with Clinics in Alberta Jasper Building, Edmonton, and Holy Cross Hospital, Calgary, accepts patients up to the age of twenty-five years.

As will be seen from the statistical report which is attached, there has been no decrease in the number of new patients seen during the year 1958. There is a small increase in the total number of patients continuously under the care of the Division of Arthritis. During the year 1958 it was 150 as opposed to 141 in 1957.

In contrast to 1957, there was a considerable increase in hospital days and in total treatments. To some extent this was due to a number of new more-severe reactions in children, necessitating intensive hospital and medical care.

Some newer cortocoid preparations have been available, and where they have been shown to be of value they have been used in the treatment of some of the cases. These newer preparations have not produced any basic change in the treatment of Rheumatoid Arthritis in the Division. The care of these patients at this time is essentially that of education of patients and family, plus the application of the fundamentals of rest, exercise, physiotherapy and medical adjuncts where necessary.

STATISTICAL COMPILATION OF CASES TREATED IN 1958

	Edmonton	Calgary	Total
Initial examinations made	25	12	37
Repeat examinations made	132	20	152
Rheumatoid Arthritis cases in 1958—new	18	10	28
Total Rheumatoid Arthritis cases under the Division of Arthritis	105	45	150
Hospital Days	942	200	1,142
Physiotherapy treatments	332	164	496
Injections	110	167	277
Office Visits	26	127	153

TREATMENTS

January 1st to December 31st, 1958

Hospital Days	1,142
Clinic and office visits	342
Physiotherapy	496
Other: including surgical, injections and special procedures	286
Total Treatments	2,266

DIVISION OF CEREBRAL PALSY CLINICS

F. G. DAY, M.D., *Director*

In 1958 the Cerebral Palsy Clinics in Calgary and Edmonton functioned on a 12-month basis.

As well as continuing our treatment of children in the younger age group, which includes their education during the time of treatment, we have attempted to spend more time on the rehabilitation of those young adults, who, after benefitting by the governmental program have still found it difficult to find their place in society. We hope, in the not too distant future, that we will have a practical program for job placement functioning with the assistance of the Edmonton Chamber of Commerce.

The standard method of classification of Cerebral Palsy has now been accepted and will be adopted in all of the clinics in Canada within the next few months. This will mean that comparisons as to the efficacy of various methods of treatment can be effected on an extremely large scale.

The research program at the Edmonton Clinic is now reaching its conclusion, most of the necessary data having been collected. There only remains to classify it and to draw whatever conclusions are forthcoming before publishing the results.

The domiciliary care is still functioning quite adequately, except in those patients wherein the daily transfer to and from the clinic is pretty well impossible.

EDMONTON CLINIC

During 1958, 55 Examining Clinics and 4 Case Conferences were held with a total of 580 examinations. There were 69 new cases seen with 51 diagnosed as cerebral palsied, 2 pending further investigation and 16 miscellaneous diagnoses.

Patients on Active Treatment

There were 144 cerebral palsied that benefitted from treatments during the year, 58 were new cases, 86 re-admissions and of these, 28 were children who were either excused from the regular schools, opportunity classrooms or attended after regular school hours. The average monthly number of cases who received treatment or instructions throughout the year was 63.

Physiotherapy

The total number of treatments given during the year was 3,916 with 132 different cases being seen.

Progress

Balance:

- 12 showed improvement in co-ordination and concentration
- 7 achieved balance or improved in balance in sitting

Reciprocation:

- 2 learned to ride tricycle showing considerable improvement in reciprocation

Crawling:

- 4 learned to crawl on all fours

Walking:

- 6 progressed to walking with help unbraced
- 3 progressed to walking with a walker
- 2 progressed as far as walking in bars
- 9 progressed as far as walking with crutches
- 4 progressed as far as walking with canes
- 6 progressed as far as walking unaided

General improvement:

- 30 showed minor gait improvement
- 22 showed considerable gait improvement
- 37 had deformities reduced
- 3 gained better group muscle control
- 9 gained improvement of general muscle control
- 3 showed minor activity increase
- 31 made progress in several phases
- 18 made no progress, some being recent new cases
- 1 showed greater independence in wheelchair activities.

Bracing:

- 7 were braced for control for the first time
- 9 had bracing reduced
- 20 had bracing removed
- 1 had bracing increased

Casts:

- 20 thumb splint or leg casts

Physiotherapy home program:

- 243 discussions and demonstrations were conducted with 113 parents
- 4 homes were visited in order to facilitate the parents' management of their children

Occupational Therapy

37 cases were treated with a total of 971 treatments during the 8 months that we had the services of an Occupational Therapist. The Physiotherapist continued Occupational Therapy with 6 cases during the remaining part of the year.

Daily Activities

Drinking:

- 1 showed progress

Feeding:

- 3 showed progress
- 2 showed very little progress

Dressing:

- 8 showed progress

Two hand activities:

- 4 showed considerable progress
- 7 showed minor progress
- 5 showed no progress

Special skills:

- (a) Loom —3 showed progress
- (b) Pre-writing —6 showed progress
- (c) Writing —4 showed progress
 - 1 showed no progress
- (d) Typing —3 showed minor progress
 - 2 showed considerable progress
- (e) Sewing machine —3 showed progress
- (f) Word board —2 showed considerable progress
- (g) Finger painting —3 gained further control
- (h) Leather craft and woodwork —1 showed progress

Arm bracing:

Extensive arm bracing was done on 4 children. One made considerable progress, the others showed improvement especially in basic hand activities and typing. Adjustable arm splints were worn on two children, one showed improvement. Of the 5 who wore hand splints 4 showed improvement.

Speech Therapy

39 cases were treated during 1958 with 1,373 treatments being given and 78 parent interviews.

Progress:

- 10 showed considerable improvement—
 - 1 severely deaf was admitted to School for the Deaf
 - 1 severely hard of hearing was admitted to the Hearing Conservation Class
- 10 showed average improvement (2 seen on monthly basis only)
- 10 showed little improvement
 - 2 were severe emotional problems
 - (all of these children were severely handicapped either emotionally or physically)
- 9 showed no improvement
 - (all were severely handicapped either mentally or physically and no further Speech Therapy was indicated)

School

During 1958, 61 children attended schoolroom 1 of the Cerebral Palsy Clinic, with a total of 1,807 instructions and 9 parent interviews. Of these 6 from senior grades attended, while having treatments, during the first 6 months of the year.

Groupings are as follows:

Pupils	Grade
1	II
3	III
1	V
1	VII

Since the opening of the second classroom in September at the Cerebral Palsy Clinic, 10 children were in attendance for varying lengths of time in 1958.

These children have received a full day of instruction, with time off only for required therapy treatments.

Studies have been based on the Alberta School Curriculum, as nearly as possible within their capacities, as limited by their various handicaps.

The pupils attending, being in differing stages of the following grade groupings, necessitated individual instruction in most cases.

Groupings are as follows:

Pupils	Grade
2	II
4	III
1	IV
2	V
1	VI

A feature of classroom 1, was instructional testing of 17 out-patients of various ages. Of these 6 attended for short periods of time and 8 were tested on the day of review.

There were 16 young children, having about the mental age of four, who attended for pre-school improvement. Of these 11 progressed but 5 were unsuccessful.

There were 23 day school children who needed remedial school work; of these 9 were from special classes and 14 from regular day school classes.

The two other groups were the Reading Readiness group and Grade I.

In Grade I —5 (2 of these returned to their regular schools)

In Reading Readiness—9 (6 of these were accepted in Grade I in regular school
3 were not ready for Grade I)

All these children attended because they were benefitting from other therapies and many had academic difficulties peculiar to their type of Cerebral Palsy.

Patients on Home Management: 105

Orthopaedic corrections or appliances	36
Surgery (26 were cases on active treatment)	27
Referred to Co-ordinator of Disabled Persons	2
Referred to Edmonton Rehabilitation Society	2
Admitted to Provincial Training School at Red Deer	5
Admitted to School for the Deaf	1
Admitted to Hearing Conservation Class	2
Moved out of the Province	2
Returned to the Province	2
Transferred to Calgary	2
Deceased	2

Foster Home Program

There were 27 out of town cases boarded in foster homes during the past year. Domiciliary allowances were paid for 2,914 days.

Braces were supplied as follows:

Long leg braces with knee joints	14	pr.
Long leg braces with knee joints, hip locks and body supports	4	pr.
Long leg ring calipers, no locks	1	pr.
Long leg braces with pelvic band	1	pr.
Long leg night splints	5	pr.
Unilateral long leg night splints	5	
Unilateral half ring calipers	1	
Ischial bearing long leg braces	3	pr.
Below knee irons	9	pr.
Unilateral below knee irons	18	
Below knee night splints	2	pr.
Spreader bars	3	
Twisters	4	
Pelvic band	1	
Body supports	1	
Shoulder and arm braces	1	pr.
Arm splint	1	
Hand splint	1	
Thumb splint	2	
Cock-up splint	6	
Cock-up splint with thumb restraint	6	
Supination splint	6	
Floating spoon	6	
Special appliances	6	
Miscellaneous items for physiotherapist	7	
Brace repairs and alterations	45	
Shoe repair and adjustments	110	

Instructions and film "A Day in the Life of a Cerebral Palsy Child" to:

- 9 Student nurses and instructresses from Archer Memorial Hospital
- 20 Intermediate nurses and instructresses from General Hospital

*Clinic films shown to:**Types of Cerebral Palsy to:*

- 2 Medical Students
- 1 Dental Student
- 1 Physiotherapy Student

Speech Therapy and Occupational Therapy techniques to:

The Edmonton Cerebral Palsy Auxiliary

General Film to:

Southern Alberta Cerebral Palsy Association
Physiotherapy Students
Winnipeg General Hospital Alumnae

Special Case Films to:

Genetic Association

Lectures by the Doctors to:

Physiotherapy Students

Student Nurses at the Royal Alexandra and Misericordia Hospitals

Instructions to:

- 2 Physiotherapy Internes (6 weeks)
- 2 Student Nurses from the University Hospital
- 1 Pediatric Instructress from the University Hospital
- 22 Third Year Medical Students
- 55 Physiotherapy Students
- 4 Medical Health Officers
- 17 Public Health Nurses from Health Units
- 14 Public Health Nursing Students from University of Alberta
- 1 Rehabilitation Officer
- 27 Student Teachers and Special Teachers
- 2 Theology Students

Movie Project

The movie project started in March, 1957 and maintained through the generosity of the Edmonton Cerebral Palsy Auxiliary has proved an invaluable aid in both the treatment and re-assessment of the cerebral palsied. We now have film records on 143 cases, 3,950 feet of film was used during the year with progress recorded in 97 cases, 62 being new cases.

A general film library has been built up and these films have been used for instructional purposes for such students as Medical, Dental and Physiotherapy.

CALGARY CLINIC

During 1958, 43 examining clinics were held with a total of 228 examinations. There were 43 new cases seen with 33 diagnosed as cerebral palsied, 5 pending further investigation and 5 miscellaneous.

Patients on Active Treatment

There were 80 cerebral palsied cases that benefitted from treatments on a rotating basis. The average monthly number of cases who received treatments or instructions through the year was 34.3.

Physiotherapy

The total number of treatments during the year has been 3,716 with 69 different children being seen, and 35 parents interviewed at special sessions.

*Progress***Balance:**

- 3 achieved head balance prior to sitting
- 5 achieved sitting balance
- 3 achieved greater confidence and much improved balance in walking
- 1 achieved co-ordination and concentration

Walking:

- 2 achieved walking with help (unbraced)
- 3 achieved walking with braces
- 3 progressed to walking in bars
- 1 achieved walking with canes
- 2 progressed to walking without braces
- 1 progressed to walking in reciprocal skis
- 3 progressed to walking unaided

General improvement:

- 4 showed minor gait improvement
- 22 showed marked gait improvement
- 19 had reduction of hip flexor, adductor and hamstring tightness, of these 12 were marked reductions
- 44 had reduction of heel cords, of these 32 have been brought to 90 degrees or above
- 9 showed marked improvement in strength and control of group muscles
- 3 showed minor improvement in strength and control of group muscles
- 5 made improvement in general muscular control
- 4 achieved increased interest and motivation
- 11 showed no progress

Bracing:

- 2 were fitted with full control braces
- 3 were fitted with a standing brace
- 3 were fitted with rotator type braces
- 3 were fitted with double short leg braces
- 5 were fitted with single short leg braces
- 5 had bracing reduced
- 5 had braces removed

Occupational Therapy

63 cases were treated with a total of 2,857 treatments during the 12 month period.

*Daily Activities***Dressing Skills:**

- 12 achieved complete independence
- 5 achieved some independence
- 4 achieved no independence

Feeding Skills:

- 5 achieved complete independence
- 2 achieved no independence

Hand Co-ordination :

- 5 made progress
- 3 made no progress

Socialization :

- 4 showed excellent improvement

Special Skills :

Typing	1
Leather work	6
Wood carving	2
Weaving	7
Rug hooking	1
Painting	5

Speech Therapy

53 cases were treated during the 12 month period with 2,800 treatments being given and 38 parents interviewed in special sessions.

Progress :

- 8 achieved normal speech
- 15 made good progress
- 20 showed some progress
- 10 made no progress

Respiratory therapy was used on 3 patients and these decidedly benefitted from the treatment.

The Chromovox and other auditory aids were used for 12 children. There were 4 new reels made for this machine, designed to be continuous with those supplied with the Chromovox, and to assist the children to improve their language and grammatical construction.

School

The Calgary Public School Board supplied the services of a teacher during 10 months of the year. There were 38 children who received instruction in the school room during the year with a total of 2,013 periods.

The majority of children who have been attending are of the group that will not be able to progress from grade to grade. Because of this they have been classed—ungraded.

The children who did receive instruction in the school room during the year attended for periods varying from 6 weeks to 10 months.

Groupings are as follows:

Pupils	Grade
13	Ungraded
15	I
5	II
4	III
1	IV

Patients on Home Management: 130

Admitted to the School for Mentally Retarded	1
Admitted to the Provincial Training School at Red Deer	3
Referred for and had psychiatric examinations	5
Surgery	12
On probation at Jamestown, North Dakota, Cerebral Palsy School	1
Moved out of the Province	2
Deceased	1

Foster Home Program

There were 19 out of town cases boarded in foster homes during the past year. Domiciliary allowances were paid for 1,551 days.

Braces were supplied as follows:

Unilateral Perlestein type night braces	10
Bilateral Perlestein type night braces	11
Unilateral gutter type night splints	5
Dennis Browne type splint	1
Full control braces	2
Unilateral double bar short leg braces	5
Bilateral double bar short leg braces	5
Bilateral long leg double bar with spreader	1
Bilateral long leg double bar braces	1
Unilateral single bar short leg brace	1
Long leg standing braces	3
Turnbuckle type cervical brace	1
Bilateral volar type wrist splints	1
Special arm stabilizer and loop	1
Plastic arch support	1
Bilateral twister type braces	3
Special adjustable attachment on stool	1
Brace adjustment and repairs	46
Shoe corrections	41

Instructions

Student nurses from Calgary General Hospital, Holy Cross Hospital and Crippled Children's Hospital	106
Students from School for Nursing Aides	177
Registered Nurses	9
Students from B.Sc. in Nursing Course at University of Alberta	9
Professor of Nursing, University of Alberta	1
School teachers	2
Physiotherapy Internes (6 weeks)	2
Physiotherapy and Occupational Therapy students	13
High School students	37
Parents	85
Medical Health Officer from Medicine Hat	1
Film "A Day in the Life of a Cerebral Palsy Child"	(times) 28

Lectures

- By Doctor to parents
- By Supervisor to Home and School Meeting
- By Physiotherapist to Alpha Gamma Delta Sorority
- By Speech Therapist to Calgary Physiotherapy Association
- By Occupational Therapist to Cosmopolitan Club

Conferences

Medical Director and Staff with Supervisor of Guidance of
Calgary School Board and Executive of Cerebral Palsy
Association

Medical Director and Staff and Cerebral Palsy Association
members

Film Project

We have film records on 36 cases, approximately 1,000 feet
of film was used during the year.

STATISTICAL SUMMARY

	Edmonton	Calgary	Total
Number of Clinics	55	43	98
Total Examinations	580	228	808
For Diagnosis	69	43	112
For Review	511	185	696
Cases on Active Therapy	144	80	224
Cases receiving Physiotherapy	132	69	201
Cases receiving Occupational Therapy....	37	63	100
Cases receiving Speech Therapy	39	53	92
Cases receiving Schooling	71	38	109
Cases on Home Management	105	130	235
Cases receiving Domiciliary Allowance	27	19	46
Total Days (domiciliary allowance)	2,914	1,551	4,465

DIVISION OF TUBERCULOSIS CONTROL

G. R. DAVISON, M.D., *Director*

The year 1958 marks the 40th year of operation of the Division of Tuberculosis Control under government authority. It is ten years since the antimicrobial drugs were added to treatment procedures. After ten years of use it can safely be said that the various drugs have been definitely proven of greatest value, particularly when combined with sanatorium care.

The mortality rate in Alberta is again quite low, and will be in the neighborhood of 3.7 per 100,000 on the basis of a population of 1,201,000. Official figures will not be available for some months.

It is lamentable that a phenomenal decline in the number of new cases cannot also be reported. In fact there were twenty-five more new active cases discovered in 1958 than in the comparable year of 1955. This is no doubt the result of an expanded case finding program, as is shown in the report of clinic services. The total number of new active cases for 1958 was 525 which is down 40 from the 1957 figure. The time has not yet arrived for any slackening in our efforts of control and prevention.

DIAGNOSTIC SERVICES

Regular clinics were maintained at the Sanatoria, Calgary City Hall, Lethbridge, Vegreville and Camrose.

Throughout the year the Mobile X-ray units operated continuously, except for staff vacation time. The emphasis being placed on the examination of the working force in the province.

The tuberculin skin testing of students' program tested more students than in previous years. This is mainly the result of the greater stability of Health Unit staffs and the increase in the number of Health Units which now cover all the populated area of the province. Our sincere thanks is extended to all members of the Health Units for their willing, active co-operation in this and other tuberculosis control projects.

The program of x-raying the chests of general hospital admissions suffered a setback as the result of the furor created by the popular press in respect of the hazards of the x-ray and the changing of x-ray equipment in some eighteen hospitals.

The x-ray units in the City Halls of Edmonton and Calgary attracted a large number of the general population. This service was also used to advantage by employers for the purpose of pre-employment chest films of prospective employees. The x-ray units in the Provincial gaols have turned up many cases among their admissions also.

The Indian Health Services through their x-ray clinics in the north of the province took films of many of our responsibilities

who reside in the outback and are inaccessible to us. Our appreciation of their services is gratefully acknowledged.

In the field of prevention the expansion of our B.C.G. vaccination begun in 1957 has continued. This project has been greatly facilitated by the Alberta Tuberculosis Association who are supplying a male nurse and an automobile suited to the north country. 4,077 vaccinations were carried out mostly on children with Indian blood. It is hoped that in a few years the efficacy of the program will be proven.

Deaths among white were less than 3 per 100,000 while among people with an admixture of Indian blood, the rate was about 30. This figure may be far from correct as there is no census breakdown as to number of residents of part Indian blood.

TREATMENT SERVICES

Sanatorium care was provided for 1,134 patients in 1958, compared with 1,206 in 1957 and 1,184 in 1956. The antimicrobial drugs were used to advantage in almost 100% of the cases of active disease. The average length of hospital stay was 246.4 days. Sanatorium treatment has gradually shortened, partially due to the continuance of drug therapy after discharge. 408 patients remained on drugs after leaving the sanatorium.

We are happy to report that waiting lists of patients no longer exist.

NURSING TRAINING

All the general hospitals in the province operating training schools for nurses are affiliated with the sanatoria. Short courses, supervised by an instructor, are given by the nursing and medical staffs. The well rounded out course is both didactic and practical, and it is felt that the students have a good opportunity to learn something about the disease, the psychology of the tuberculous patient, and the nursing of infectious disease.

MEDICAL STUDENTS

The Aberhart Memorial is associated with the Medical Faculty of the University. Third year students attend one afternoon a week for lectures, demonstrations and clinics related to tuberculosis and other chest conditions. During the summer vacation third year students are taken on the medical staff in the Calgary Sanatorium as well as in Edmonton. As tuberculosis is still a serious problem it is lamentable that more time cannot be allotted to teaching about it.

EDUCATION

In the main, this consists of the teaching of all school grades, both elementary and high school. It also provides teaching of commercial courses and vocational classes. In this way children carry on with their schooling as they would if at home and do not lose time or grades. Those taking commercial and other courses are fitting themselves for rehabilitation after discharge

from hospital. This program has been in operation for some twenty years, and has been very well worth while. It is the consensus of industry that rehabilitated patients make very satisfactory employees and absenteeism among them is not a problem. Sincerest thanks are extended to all employers who have so readily co-operated in the plan. Grateful acknowledgment is also made of the assistance rendered by the Alberta Tuberculosis Association. This Association supplies the services of rehabilitation officers in Edmonton and Calgary, as well as financial assistance to those ex-patients who are continuing their training. The Association also supplies one of the three full-time teachers at the Aberhart Memorial Sanatorium.

Occupational therapists employed by the Tuberculosis Division are doing marvelous work at both hospitals. In the main, this program is carried on from the standpoint of education in an endeavor to assess the aptitudes and capabilities of the student with a view to his rehabilitation.

Grateful acknowledgment is made of the assistance with tuberculosis control supplied by the Alberta Tuberculosis Association who are providing:

1. Clinic nursing services in Edmonton, Calgary, and Lethbridge.
2. One-half the expense of mobile surveys.
3. Organizers of surveys.
4. A full time teacher at the Aberhart Memorial and a part time teacher at the Baker Memorial. At both hospitals patients, on a part time basis, teach basic English.
5. Rehabilitation officers.
6. A male nurse and automobile for Tuberculin Skin Testing and B.C.G. Program.
7. Short post graduate courses for staffs of sanatoria.

On behalf of the patients our sincere thanks is extended to all the voluntary groups and individuals for their kindly interest in, and the assistance with, their welfare.

Our grateful appreciation is extended to the Medical Superintendents of the sanatoria, and their staffs for their willing co-operation and valuable services throughout the year.

DEPARTMENT OF PUBLIC HEALTH

DIAGNOSTIC CLINIC

1. STATIONARY CLINICS	Number Sessions	New Cases of Tub. Active		Total Examinations
		Pul.	Non-pul.	
Baker Memorial Sanatorium	99	24	5	4,791
Aberhart Memorial Sanatorium	99	46	4	5,069
Calgary	22	....	....	76
Camrose	5	....	....	115
Drumheller	12	....	....	174
Lethbridge	12	11	....	1,031
Medicine Hat	12	1	....	562
Red Deer	11	1	....	309
Vegreville	5	....	....	115
TOTAL	277	83	9	12,242
OTHER CLINICS				
*Miscellaneous .....	....	111	1	10,254
Total all Clinics .....	....	194	10	22,496

In addition to the above 204 newly discovered cases of active tuberculosis there was also discovered 624 cases of inactive tuberculosis.

*Films sent in from various points and paid for by the Tuberculosis Division.

2. Tuberculin Testing and X-ray Surveys (Conducted by Public Health Nurses, Teachers, Business Firms, Hospitals, etc.)	No. Tbn. Tested	No. X-rayed
Red Cross Blood Transfusion Service	1	12
Food Handlers	77	302
Nursing Aide Trainees	71	362
University Students	2	657
School Board Employees	31	260
Provincial Laboratory .....	.....	108
Galt Rehabilitation and Senior Citizens' Home, Lethbridge .....	.....	82
Public Health Nurses .....	.....	27
Commercial Stats .....	.....	16
CHCT - TV .....	.....	2
Travelling Nurse	1,228	.....
School Surveys (see section 2b)	49,644	3,552
TOTAL	51,054	5,380

Total number given service through this program is 52,469 i.e. number x-rayed plus number tuberculin tested, but not x-rayed. 231 x-rayed on Mass Survey is deducted.

- 2a. Number out-patient Streptomycin injections (Aberhart Memorial Sanatorium and Baker Memorial Sanatorium)—1,587.

2b.—SCHOOL SKIN TESTING SURVEY

	No. Tested		No. Reactors		No. X-rayed		New Cases Tub.	
							Active	Inactive
	School	Contacts	School	Contacts	School	Contacts		
Alberta East								
Central H.U. ....	....	....	....	....	125(125)	87(87)	5	5
Athabasca Health Unit ..	1,609	151	77	35	177(123)	64(34)	....	4
Barons Eureka H.U.	1,316	145	42	62	40(15)	109(62)	1	2
Calgary	346	....	24	....	*240(240)	....	....	....
Chinook H.U. ....	....	....	....	....	73(73)	15(15)	1	....
Drumheller H.U. ....	....	....	....	....	8(8)	....	....	....
Edmonton	5,199	18	34	13	43(25)	19(9)	1	....
Edson H.U.	645	73	21	4	30(19)	12(8)	1	....
Foothills H.U. ....	....	....	....	....	30(30)	10(10)	1	....
Fort Assiniboine	87	....	30	....	6(1)	....	....	....
Grande Prairie H.U.	808	93	38	28	110(80)	91(76)	4	5
Jasper Place H.U.	138	26	....	....	1(1)	....	....	....
Leduc Strathcona H.U. ..	5,463	233	69	57	33(8)	30(5)	....	....
Medicine Hat H.U.	16	....	....	....	54(54)	78(78)	....	....
Minburn-Vermilion H.U. .	2,068	111	116	35	165(48)	87(51)	....	3
Mount View H.U.	3,050	354	103	140	80(15)	68(16)	....	....
North Eastern								
Alberta H.U.	757	....	86	....	116(53)	3(3)	1	....
Peace River H.U.	4,066	310	168	69	174(88)	159(123)	3	1
Red Deer H.U. ....	....	....	....	....	25(25)	31(31)	1	2
Slave Lake .....	....	....	....	....	3(3)	....	....	....
Stony Plain H.U.	190	9	5	4	14(9)	41(37)	....	3
Sturgeon H.U.	9,476	....	300	....	148(148)	118(118)	2	3
Sunnynook	81	6	3	1	3(1)	1	....	....
Vegreville H.U.	4,000	671	221	146	214(13)	126(16)	....	3
Warner	892	....	22	....	20	....	....	....
Wetoka H.U.	6,040	891	298	290	195(50)	244(59)	2	11
Youngstown	366	....	40	....	27(2)	1(1)	....	1
Desmarais .....	....	....	....	....	4(4)	....	....	....
TOTAL	46,553	3,091	1,697	884	2,158(1261)	1,394(839)	23	43

Figures in brackets indicate number of persons x-rayed under this program whose Tuberculin Test results have not yet been reported to the Division.

*231 of these x-rayed at the City Hall Unit and are included in count of mass surveys.

X-RAY SURVEYS

Surveys at 176 Rural Points	140,534
Industrial City Hall, Calgary	978
Industrial Mobile Unit, Calgary	13,256
School Survey, City Hall, Calgary	207
City Hall, Calgary	6,145
Nursing Aide Trainees, City Hall, Calgary	329
City Hall, Edmonton	7,879
Industrial Mobile Unit, Edmonton	9,029
Lethbridge Gaol	1,642
Fort Saskatchewan Gaol	1,777
TOTAL	181,776

SUMMARY MOBILE UNIT SURVEYS

Number x-rayed	181,776	
Probable Tuberculosis Active	65	(28 previously discovered)
Probable Tuberculosis Inactive	762	(516 previously discovered)
Further Examination Requested	1,740	
Non-Tuberculous Chest Conditions	2,109	
Undiagnosed (including 401 spoiled films)	407	
Pleurisy Active .....	.....
Pleurisy Inactive	216	(50 previously discovered)
No disease	176,477	

4.—SUMMARY CLINICS AND SURVEYS

	Total Number Examinations
Stationary Clinics	12,242
Other Clinics	10,254
Surveys (excluding Mobile Unit and School Surveys)	3,056
School Surveys	49,413
Mobile Unit	181,776
Department Indian and Northern Affairs	13,774
Hospital Admission Program	13,183
TOTAL	283,698

5.—SOURCES OF DISCOVERY NEW CASES OF TUBERCULOSIS

	1957	%	1958	%
Clinics	794	60.7	828	60.9
Referred for admission, family doctor	204	15.6	228	16.8
Surveys	5	.4	1	.07
Referred by Department of Veterans Affairs or National Defence	17	1.3	19	1.4
Provincial and Hospital Laboratories	8	.6	15	1.1
Hospital Admission Films	107	8.2	87	6.4
Other sources	46	3.5	92	6.8
Department of Indian and Northern Affairs (includes 78 Treaty Indians 1958)	126	9.6	89	6.6
TOTAL	1,307		1,359	

The following table sets forth the sources of discovery giving credit to programs actually referring the cases to the Tuberculosis Clinics and for admission to Sanatoria beds for the establishing of diagnoses.

	1957	%	1958	%
Family Doctor	396	30.3	361	26.6
Mobile Unit	131	10.0	215	15.8
Hospital Admission	133	10.2	102	7.5
Contacts	108	8.3	143	10.5
Dept. National Health and Welfare	79	6.0	80	5.9
School Surveys	25	1.9	72	5.3
Dept. of Indian and Northern Affairs	124	9.5	88	6.5
Surveys (Business, Hospitals, etc.)	30	2.3	6	.4
Department of Veterans Affairs and National Defence	21	1.7	27	1.9
Provincial and Hospital Laboratories	11	.8	16	1.2
X-San Other Provinces or Countries	74	5.7	91	6.7
Hungarian Refugees	87	6.7	3	.2
Food Handlers .....	.....	.....	19	1.4
Other Sources	49	3.7	90	6.6
Gaol	9	.6	16	1.2
City Hall Units	30	2.3	30	2.2
TOTAL	1,307		1,359	

6.—CLASSIFICATION OF NEW CASES OF ACTIVE AND INACTIVE TUBERCULOSIS

Minimal	701	
Moderately advanced	230	
Far advanced	69	
Primary	125	
Tuberculous Pleurisy with effusion and evidence of previous pleurisy.....	142	
Non-Pulmonary Tuberculosis	92	
TOTAL	1,359	
Number newly discovered cases active tuberculosis	525	
Number newly discovered cases inactive tuberculosis	834	
Number of reactivated cases	48	
Number of non-residents diagnosed tuberculous (includes 57 Immigrants and 3 Hungarian Refugees)	89	
Number known contacts of newly discovered cases	2,456	
Number known contacts checked	2,107	85.8%

OLD TUBERCULIN 1958

	Number of Bottles Sent	
	BMS	AMS
Dilution No. 3	72	106
Dilution No. 3	533	702
Dilution No. 4	38	—
	643	808

In addition to the above Patch Tests were sent to Health Units, Municipal Nurses and Family Doctors upon request. The Tuberculosis Division recommends however that the Mantoux Test be used as often as possible in preference to the Patch Test.

B.C.G. VACCINATIONS 1958

1. Nurses (a) Graduates	3
(b) Students	168
(c) Other Nursing Personnel	222
2. Other Hospital Personnel	170
3. Medical Students	9
4. Indians and Eskimos, adults and children (Vaccinated by Department of Indian and National Affairs	2,032
5. All Other Persons	
(a) Newborn contacts	16
(b) Adults and children, contacts	88
(c) Newborn, not contacts	1
(d) Adults and children, not contacts	1,368
TOTAL	4,077

INSTITUTIONAL REPORT

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium
Patients under treatment January 1, 1958	186	256
Number admitted during 1958	288	404
Number transferred in during 1958	1	5
Number treated during 1958	475	665
Number discharged or died during 1958	327	412
Number transferred out during 1958	5	1
Number discharged, transferred out or died 1958	332	413
Number of patients under treatment December 31, 1958	143	252
Number of patients under treatment in Alberta January 1, 1958	442	
Number of admissions during 1958	692	
Number of patients treated in Alberta during 1958	1,134	

DIAGNOSIS OF PATIENT ADMISSIONS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium
Non tuberculous	2	13
For diagnosis	69	30
Pleural effusion	6	7
Tuberculosis inactive	23	10
Primary tuberculosis	27	44
Non-pulmonary tuberculosis:		
Adenitis	6	20
Addison's Disease .....	...	2
Bone	7	11
Erythema Nodosum	1	...
Eye	3	...
Genito-urinary	8	15
Meningitis	2	4
Pelvic	4	11
Skin	1	2
Sinus	1	...
Taeniosynovitis .....	...	1
Pulmonary tuberculosis active:		
Minimal	45	65
Moderately advanced	44	106
Far advanced	38	59
Miliary	1	4
	288	404
Number with positive sputum on admission	38	83
Number with negative sputum on admission	250	321
Number negative on admission, positive later .....	...	33
Number of readmissions during 1958	48	84
Number both admitted and readmitted during 1958	7	8
Number left against advice during 1958	10	33
Number of patient days	65,822	93,890
Number of patient days in other provinces under reciprocal agreement		2,586
Number of patients in other provinces, January 1, 1958		8
Number of admissions in other provinces under reciprocal agreement		12
Total number of patient days including those in other provinces under reciprocal agreement		162,298
Number of institutional patient days provided for non-residents in Alberta under reciprocal agreement		3,672
Number of patients in Alberta Sanatoria, non-residents under reciprocal agreement, January 1, 1958		9
Number of admissions, non-residents, under reciprocal agreement		13

OPERATING ROOM REPORT

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Thoracoplasty—			
Number of stages	34	5	39
Number of 1st stages	24	5	29
Number of revisions .....	...	...	...
Number of cases	34	5	39
Aspirations of chest	68	25	93
Bronchogram	33	32	65
Bronchoscopy	42	31	73
Casts	4	19	23
Implantation D.O.C.A.	4	11	15
Lobectomy	19	15	34
Lobectomy and wedge resection .....	...	1	1
Lobectomy and decortication .....	...	7	7
Nephrectomy	6	3	9
Pneumonectomy	1	2	3
Segmental resection	4	13	17
Thoracoplasty	8	2	10
Thoracotomy	6	1	7
Orthopaedic operations	9	11	20
Miscellaneous procedures and examinations	454	40	494
TOTAL	692	218	910

DEPARTMENT OF PUBLIC HEALTH

SUMMARY PNEUMOTHORAX CASES

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Outside Points	Total
Under treatment beginning of year	2	4	....	6
Number of new cases during year	1	....	....	1
Number of cases under treatment on admission .....	....	....	....	....
.....	3	4	....	7
Number cases discontinued	1	4	....	5
Number cases transferred out of Alberta .....	....	....	....	....
Number transferred to other sections of Division .....	....	....	....	....
.....	1	4	....	5
Number under treatment end of year	2	....	....	2
Unsuccessfully attempted .....	....	....	....	....
Refills:				
Resident	51	....	....	51
Out-patient	11	23	....	34
.....	62	23	....	85

SUMMARY PNEUMOPERITONEUM CASES

Under treatment beginning of year	3	12	1	16
Number of new cases during year	4	7	1	12
Number of cases under treatment on admission .....	....	....	2	2
.....	7	19	4	30
Number discontinued	4	7	3	14
Number transferred out of province .....	....	....	....	....
Number transferred to other sections of Division .....	....	3	....	3
.....	4	10	3	17
Number under treatment end of year	3	9	1	13
Number of refills:				
Resident	161	180	....	341
Out-patient	7	183	61	251
.....	168	363	61	592

Patients received pneumoperitoneum refills at the following outside points:

Lac La Biche
St. Paul
Red Deer

NUMBER DISCHARGED ON DRUGS 1958

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Isoniazid and Para-amino Salicylic Acid	140	217	357
Isoniazid and Streptomycin	1	24	25
Streptomycin and Para-amino Salicylic Acid	1	5	6
Isoniazid, Streptomycin and Para-amino Salicylic Acid	3	5	8
Isoniazid and Seromycin .....	....	1	1
Isoniazid and Cycloserine .....	....	1	1
Isoniazid	7	....	7
Streptomycin and Seromycin .....	....	2	2
Para-amino Salicylic Acid	1	....	1
TOTAL	153	255	408

LABORATORY REPORT

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
SPUTUM EXAMINATIONS:			
Positive	478	521	999
Negative	3,400	2,294	5,694
TOTAL	3,878	2,815	6,693
URINE EXAMINATIONS	8,526	7,712	16,238
BLOOD EXAMINATIONS:			
Blood Counts	4,189	4,628	8,817
Sedimentation Rates	2,834	3,113	5,947
Blood Sugars	87	643	730
TOTAL	7,110	8,384	15,494
MISCELLANEOUS:			
Pleural Fluid	22	10	32
Spinal Fluid	7	346	353
Gastric Analysis	1	10	11
Culture	1,783	1,588	3,371
Guinea Pig Inoculation	388	994	1,382
Other	2,529	1,001	3,530
TOTAL	4,730	3,949	8,679
WASSERMAN REPORT:			
Positive	8	8	16
Negative	275	308	583
TOTAL	283	316	599
Basal Metabolism Rate .....	...	11	11
Cardiograph .....	...	127	127

DENTAL REPORT

Number of patients (individuals)	329	525	854
Number of treatments	24	488	512
Number of prophylactic treatments	140	52	192
Number of fillings	39	257	296
Number of extractions	142	211	353
Number of new dentures and repairs	24	42	66

X-RAY DEPARTMENT REPORT

	Baker Memorial Sanatorium		Aberhart Memorial Sanatorium		Total	Total	Grand Total
	In Pts.	Out Pts.	In Pts.	Out Pts.	In Pts.	Out Pts.	
RADIOGRAPHS MADE:							
Chest—Full Sized	1,388	1,054	1,924	1,035	3,312	2,089	5,401
Miniature	166	4,549	1	5,726	167	10,275	10,442
Ribs	2	2	...	1	2	3	5
Pelvis	17	14	33	22	50	36	86
Extremities	66	162	41	26	107	188	295
Spines—Cervical	2	2	8	1	10	3	13
Dorsal	56	59	34	23	90	82	172
Lumbar	41	76	32	13	73	89	162
Skull	4	...	2	...	6	...	6
Sinuses	2	2	...	...	4	...	6
F.P. Abdomen	4	1	10	...	14	1	15
G.B. Series	2	...	3	...	5	...	5
G.I. Series	6	...	4	...	10	...	10
Barium Enema	1	...	2	...	3	...	3
Intravenous Pyelogram ..	20	3	40	28	60	31	91
Retrograde	12	...	6	...	18	...	18
Bronchogram	35	...	42	8	77	8	85
Sinogram	3	...	21	2	24	2	26
Ordographs	57	1	66	4	123	5	128
Dental	5	3	85	...	90	3	93
K.U.B.	10	...	...	...	10	...	10
Shoulder .....	...	6	...	...	...	6	6
Clavicle .....	...	3	...	...	...	3	3
Sacro-iliac .....	...	4	...	...	...	4	4
Esophagus	1	...	...	...	1	...	1
Mastoid	2	...	...	...	2	...	2
TOTAL	1,902	5,941	2,356	6,889	4,258	12,830	17,088
Fluoroscopic Examinations	276	31	221	167	497	198	695
Films sent in for interpretation .....	...	11,149	...	20,863	...	...	32,012
Basal Metabolism Rate .....	...	7	...	...	...	...	7
Cardiograph .....	...	26	...	...	...	...	26
Audiogram .....	...	1	...	...	...	...	1

DEPARTMENT OF PUBLIC HEALTH

CLASSIFICATION OF DISCHARGED PATIENTS

	RESIDENCE			In.	On discharge		
	On Admission	31 days or less	Over 31 days		AI.	AU.	D.
1. For diagnosis	112	78	34	5	....	....	3
2. Primary Tuberculosis	59	5	54	18	40	....	1
3. Reinfection type pulmonary tuberculosis clinical:							
Minimal	*82	19	63	36	40	1	2
Moderately advanced	86	12	74	40	39	1	6
Far advanced	23	7	16	15	5	....	3
4. Reinfection type pulmonary tuberculosis positive:							
Minimal	39	1	37	11	26	....	1
Moderately advanced	107	2	105	37	64	3	3
Far advanced	93	3	90	31	37	3	22
Miliary	6	....	6	4	2	....	....
5. Tuberculosis pleurisy	*20	2	18	7	12	....	....
6. Non-pulmonary tuberculosis:							
Genito-urinary	28	4	24	5	20	1	2
Bone	26	1	25	13	12	....	1
Adenitis	23	5	18	1	21	1	....
Pelvic	18	2	16	2	16	....	....
Meningitis	6	....	6	6	....	....	....
Chest wall	1	....	1	....	1	....	....
Lupus Vulgaris	2	1	1	....	2	....	....
Addison's Disease	2	1	1	....	1	1	....
Bursitis	1	....	3	....	1	....	....
Eye	3	....	3	....	3	....	....
Retroperitoneal abscess	1	....	1	....	1	....	....
Bazin's Disease	1	1	....	....	1	....	....
Erythema Nodosum	1	....	1	1	....	....	....
Total active tuberculosis	627	66	561	227	344	11	41
Total treated .....	....	....	595	194	325	4	34
Total untreated .....	....	144	....	38	19	7	10
Grand Total	739	....	....	232	344	11	44

EXPLANATION OF ABBREVIATIONS AND TERMS USED

The standard classification is that of the National Tuberculosis Association. Minimal, Moderately Advanced and Far Advanced refer to anatomical extent of disease.

In.	.....Inactive
AI.	.....Active improved
AU.	.....Active unimproved
D.	.....Died

N.B. Only those in residence over 31 days are classed as "treated".

*3 patients classified as minimal tuberculous on admission and 1 classified as tuberculous pleurisy on admission were found to have non-tuberculous disease. This accounts for the apparent discrepancy in the above table.

CLASSIFICATION ON ADMISSION OF 739 DISCHARGED PATIENTS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
For diagnosis	80	32	112
Primary tuberculosis	18	41	59
Pulmonary tuberculosis	176	259	435
Tuberculous pleurisy	9	11	20
Non-pulmonary tuberculosis	44	69	113
TOTAL	327	412	739

DIAGNOSIS ON DISCHARGE OF PATIENTS ADMITTED FOR DIAGNOSIS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Tuberculosis pulmonary inactive	4	4	8
NON-TUBERCULOUS:			
Pulmonary fibrosis	5	4	9
Pulmonary fibrosis with sepsis	4	.....	4
Pulmonary fibrosis with emphysema	2	.....	2
Pulmonary fibrosis etiology	2	.....	2
Pulmonary fibrosis, idiopathic and granulomatosis	1	.....	1
Bronchopneumonia	2	.....	2
Pneumonia and pleurisy	1	1	2
Pneumonia with interlobar fusion .....	.....	1	1
Bronchopneumonia with interlobar pleurisy .....	.....	1	1
Pneumonia with interlobar empyema	1	.....	1
Pneumonia	2	.....	2
Pneumothorax	1	.....	1
Basal infection and pneumothorax	1	.....	1
Pneumonitis	1	3	4
Pneumonitis with abscess	1	.....	1
Pneumonitis with atelectasis	1	.....	1
Pulmonary embolism	1	.....	1
Pulmonary tumor	1	.....	1
Pulmonary abscess secondary to post-operative embolus	1	.....	1
Pulmonary abscess	1	.....	1
Pulmonary sepsis .....	.....	1	1
Acute respiratory infection	1	.....	1
Pneumonoconiosis with infection	1	.....	1
Spontaneous pneumothorax	1	.....	1
Pleurisy with effusion	1	.....	1
Thickened pleura following haemothorax	1	.....	1
Fibrous mesothelioma of lung	1	.....	1
Hamartoma of lung	1	.....	1
Pleurisy with effusion etiology	2	.....	2
Bronchial asthma	1	1	1
Basal lung abscess .....	.....	1	1
Bronchitis with emphysema and bronchiectasis	1	.....	1
Emphysematous blebs	1	.....	1
Bronchiectasis	1	.....	1
Bronchitis	1	.....	1
Fibrocalcific nodule lung probably benign tumor	1	.....	1
Silicosis .....	.....	1	1
Bronchogenic carcinoma	6	.....	6
Undiagnosed, probable metastatic carcinoma	1	.....	1
Cardiovascular disease with pulmonary embolus	1	.....	1
Congenital heart disease .....	.....	1	1
Histoplasmosis	1	.....	1
Undiagnosed, suspect tumor	1	.....	1
Undiagnosed	1	.....	1
Scleredonia	1	.....	1
Cervical adenopathy etiology	1	.....	1
Postural scoliosis .....	.....	1	1
Herniated intervertebral disc .....	.....	1	1
Epilepsy	1	1	2
Chronic glomerulonephritis	1	.....	1
Erythema nodosum, etiology	1	.....	1
Infection urinary tract	1	.....	1
Probable periarteritis nodosa	1	.....	1
Cervical adenitis, etiology	1	.....	1
Spondylitis .....	.....	1	1
Benign lymphocytic meningitis .....	.....	1	1
Post operative intestinal adhesions with partial obstruction and draining sinus .....	.....	1	1
Osteo arthritis spine	1	.....	1
No disease	12	10	22
TOTAL	80	34	114

CLASSIFICATION ON DISCHARGE OF TREATED CASES OF ACTIVE TUBERCULOSIS
AND TUBERCULOUS PLEURISY

	On admission Number	On discharge Improved	On discharge Unimproved	Died
Minimal	100	* 95	.....	2
Moderately advanced	179	170	3	6
Far advanced	106	84	1	21
Primary	54	53	.....	1
Miliary	6	6	.....	.....
Non-pulmonary tuberculosis	98	96	.....	2
Tuberculosis pleurisy	18	* 17	.....	.....
TOTAL	561	521	4	32

*3 cases classified as minimal tuberculosis on admission and 1 case classified as tuberculous pleurisy on admission were found to be non tuberculous. This accounts for the apparent discrepancy in the above table.

DEPARTMENT OF PUBLIC HEALTH

SUMMARY

RESIDENCE OF DISCHARGED PATIENTS	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Cities	182	156	338
Towns	27	71	98
Villages	4	1	5
Counties	11	2	13
Enlarged Municipal Districts	45	79	124
Local Improvement Districts	34	91	125
Special Areas Board	2	...	2
Non Resident	21	12	33
Unknown	1	...	1
TOTAL	327	412	739

SEX OF DISCHARGED PATIENTS	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Male	208	210	418
Female	119	202	321
TOTAL	327	412	739

AGE ON ADMISSION			
Under 1 year .....	...	1	1
From 1 - 9 years	25	61	86
From 10 - 14 years	5	23	28
From 15 - 19 years	17	38	55
From 20 - 29 years	65	76	141
From 30 - 39 years	61	67	128
From 40 - 49 years	51	55	106
From 50 - 59 years	47	44	91
From 60 - 69 years	36	27	63
From 70 years and over	20	20	40
TOTAL	327	412	739

SOCIAL STATUS OF DISCHARGED PATIENTS			
Single	113	197	310
Married	184	181	365
Divorced	4	3	7
Separated	15	13	28
Widowed	11	18	29
TOTAL	327	412	739

RESIDENCE IN ALBERTA			
Born in Alberta	109	245	354
1 year or less	38	14	52
1 - 5 years	45	37	82
6 - 9 years	23	15	38
10 - 14 years	16	16	32
15 - 19 years	4	4	8
20 - 29 years	20	20	40
30 or more years	72	61	133
TOTAL	327	412	739

RACIAL ORIGIN			
Metis	31	119	150
Negro	1	...	1
Chinese	4	7	11
Indian	2	5	7
Japanese	2	2	4
TOTAL	40	133	173

LENGTH OF STAY IN SANATORIUM OF DISCHARGED PATIENTS

DEATHS:			
Number in Sanatorium under 31 days	4	6	10
Number of patient days	52	67	119
Average patient days	13	11.2	11.9
Number in Sanatorium 31 days or more	16	18	34
Number of patient days	8,636	9,142	17,778
Average patient days	539.8	507.9	522.9

DISCHARGES:			
Number in Sanatorium under 31 days	89	45	134
Number of patient days	1,201	742	1,943
Average number patient days	13.5	16.5	14.5
Number in Sanatorium 31 or more days	218	343	561
Number of patient days	63,867	98,382	162,249
Average number of patient days	292.96	286.8	289.2
Total number deaths and discharges	327	412	739
Total number patient days	73,756	108,333	182,089
Average number patient days	225.6	262.9	246.4

DIVISION OF MENTAL HEALTH

R. R. MACLEAN, M.D., *Cert. in Neurol. and Psychiatry*,
F.A.P.A., *Cert. M.H.A. (A.P.A.)*, *Director*

ADMINISTRATION

The Office of the Director continued to promote the development and integration of the preventive and treatment services of the Mental Health Division. There were increases in the numbers of personnel in Guidance Clinics and further encouragement was given to staff members to take advanced training. The institutional facilities for the treatment and care of the mentally ill and the mentally deficient were improved. Emphasis was placed on improved rehabilitation services and activities.

Details of the above references appear in the respective individual reports.

PREVENTIVE SERVICES

Provincial Guidance Clinics

The total work load of the full-time Clinics increased—the individual increase being most noticeable in the Edmonton Clinic. The Clinics reported that favourable results were obtained in their treatment programs.

Some 35 points outside the full-time Clinic Centres were visited by teams from the latter.

The clientele of the Clinics was comprised chiefly of emotionally disturbed and otherwise maladjusted children. Relatively few mentally retarded cases were examined. The Clinics again reported that a total of approximately 30 severely emotionally disturbed children were being treated in the various Clinics at any particular time.

The Clinics participated in many public educational activities. Individuals or teams from the Clinics gave talks and took part in panel discussions, work-shops, institutes, and in radio and television presentations.

The Clinics assisted in the follow-up work with the discharged Mental Hospital cases. They also provided certain services to the Cerebral Palsy and other Health Clinics. Reports and recommendations were submitted to the appropriate authorities.

Separate reports from the various Clinics follow.

PROVINCIAL GUIDANCE CLINICS

PROVINCIAL GUIDANCE CLINIC, EDMONTON

A. R. SCHRAG, M.D., *Clinic Psychiatrist*

During the year of 1958 the Edmonton Guidance Clinic was expanded by taking over the full area of the first floor of the Clinic Building, and by adding to the staff an Assistant Psychiatrist, a Social Worker and a Stenographer-Clerk. As a full time Assistant Psychiatrist was not available, two part-time Psychiatrists were employed. Two members of the staff (a Social Worker and a Psychologist) were given Federal Professional Training Grants. It is expected that both will receive their Master's degrees in 1959 and return to the Clinic. For the first time Summer Relief staff was employed and this was very advantageous in that these persons were taken on the permanent staff to fill vacancies created by members of the staff who resigned, or were given leave of absence for further training. An intensive in-service training program continues and closer supervision of treatment of patients by the staff members is now possible.

Regular Conferences with the Visiting Teachers of the Edmonton Public School Board have been established to discuss problems of management of children being counselled by the Visiting Teachers, as well as reviewing the progress of children who have been referred to the Clinic for treatment. These conferences proved to be very valuable.

A new Clinic was opened at Edson and two days were given to this centre during the month of August.

The demands for Clinic services continued high and a large percentage of Clinic referrals were made up of individuals requiring more prolonged treatment than in the past. Several schizophrenic children were carried by the Clinic in treatment. Two trips into the Peace River-Grande Prairie area were made during 1958.

New cases examined numbered 1,177 which is 202 cases more than were seen in 1957. 391 cases were re-registered, an increase of 51 over 1957. The total work load was 11,640, showing an increase of 3,616 periods over the previous year. More intensive work was done with patients and their families as well as time spent on in-service staff training.

Age and Sex Distribution—The ratio of male to female cases was 1.79:1. Of all new cases 95.7% were under the age of 20 years. Of these 40.7% were in the 5 to 9 age group, while 28.89% were in the 10 to 14 group.

Classification of Types of New Cases—There was approximately the same proportion of cases in the various diagnostic classifications as in 1957. There was some increase in numbers of Educational Problems, while the percentage of cases which were

mentally defective decreased from 21.05% to 18.07%. There continued to be a number of severely disturbed children in the early age range.

Educational Activity—This has altered somewhat due to the re-organization of the curriculum for the Faculty of Medicine. First year Medical Students did not visit the Clinic during the first part of 1958 but groups of third year Medical Students visited the Clinic under the program of pediatric teaching. The Bachelor of Science Nurses continued to visit the Clinic as did the Nurses from several of the local hospitals. The number of periods given for this educational purpose was 95. Discussions and addresses by staff members to community organizations numbered 32.

City of Edmonton—The total number of new cases examined amounted to 675, while 267 were re-registered during the year. The total work load was 9,665, an increase of 2,865 over the previous year, showing an increase of 2,865 in the total case load for the City of Edmonton.

Edmonton Rural—In this area 70 new cases were seen and 8 were re-registered, amounting to a work load of 190, which shows an increase of 61 periods over last year.

Athabasca-Lac La Biche—21 new cases and 8 re-registered cases were seen for a work load of 106 periods. This is a net increase of 5 cases over 1957. Two Clinic visits were made to this area.

Barrhead-Westlock-Thorhild—Two trips were made to Barrhead and Westlock and Thorhild was visited in rotation with these points. 29 new cases and 11 re-registered cases were seen, with a work load of 132, which was an increase of 68 periods over 1957.

Camrose-Killam—In the two trips made to this area in 1958, 28 new cases and 5 re-registered cases were seen to give a work load of 53 periods. This was a decrease of 6 cases.

Edson—This was a new Clinic point visited once during the year. 14 new cases were seen for a work load of 46 periods.

Lamont-Smoky Lake—Three trips were made to the Lamont area and Smoky Lake was not visited. 23 new cases and 7 re-registered cases were seen which gives a total work load of 70 periods, a decrease of 5 cases over 1957.

Peace River-Grande Prairie—Two trips of two weeks' duration were made into this area, during which time 148 new cases and 31 re-registered cases were seen for a work load of 696. This was a net increase of 95 cases.

Bonnyville-St. Paul-Two Hills—Two trips were made into this area in 1958. 51 new cases and 13 re-registered cases were seen for a total work load of 191. This was a net increase of 9 cases.

Vegreville-Vermilion-Wainwright—Four trips were made into this area in 1958. 87 new cases and 26 re-registered cases were seen for a total work load of 359. This was a net increase of

41 cases. Wainwright was visited in rotation with Vegreville and Vermilion as no Clinics were held in Holden, although the occasional case from Holden was seen in Edmonton.

Wetaskiwin—Four trips were made to this point and 28 new cases and 14 re-registered cases were seen. This was a total work load of 132 which gave a new increase of 13 cases over 1957.

PROVINCIAL GUIDANCE CLINIC, PONOKA

MARGARET B. MCWILLIAM, M.D., *Clinic Psychiatrist*

During 1958 Clinics in this area were attended, as is customary, by a Psychiatrist, a Psychologist and a Social Worker from the Provincial Mental Hospital staff. Clinics this year were held at Ponoka and Stettler. Twenty-eight new and 13 re-registered cases were seen, with a work load of 118. Some cases were seen at the request of private physicians, but the majority were referred through the Schools and Health Units.

Ponoka-Rimbey—The Guidance Clinic operated through the Health Unit in the Town of Ponoka, which was very helpful in arranging appointments and accommodation. Two formal Clinics were held in Ponoka during the year, and a number of other cases were seen at intervals upon request. No Clinic was held in Rimbey, the cases from that district having been brought to Ponoka.

Stettler-Castor-Consort—Two Clinics were held at Stettler. No Clinics were requested for Castor or Consort. Nine new cases and five re-registered cases were seen.

PROVINCIAL GUIDANCE CLINIC, RED DEER

L. J. LE VANN, L.R.C.P., Edin., L.R.C.S., Edin.,

L.R.F.P.S. Glas., *Clinic Psychiatrist*

The Guidance Clinic activities at Red Deer have shown some diminution. 85 new patients were seen at the Clinic through referrals from school authorities, private physicians and courts. 21 of these were male, under the age of 16, and 23 were males over the age of 16. Eight were females under the age of 16 and 33 females over the age of 16.

The total number of interview hours was 517—of these 385 dealt with Psychotherapeutic interviews with patients and 132 were collateral interviews.

Broken up into its components, this relates as follows:

Psychiatrist	517 hours
Psychologist	None available
Social Worker	23 hours
School Medical Officer	Nil

In addition to these interviews, 23 Psychometric examinations were done.

Work at the Municipal Hospital—There was one patient given modified coma insulin therapy on twenty occasions, and electric shock therapy was carried out on 71 occasions.

The total case load was 634.

Extra Clinic Services—This year, as in previous years, the Guidance Clinic staff gave 18 talks during the year. This included talks to Service Clubs, Home and School Associations and two Television broadcasts.

PROVINCIAL GUIDANCE CLINIC, CALGARY

N. C. HORNE, M.B., M.R.C.S., D.P.M., *Clinic Psychiatrist*

There were some major staff changes in the year 1958. The Clinic worked under a severe handicap during the early part of the year because of lack of staff. This situation was partially rectified in the spring with the appointment of personnel to the vacant positions and a consultant psychologist from the staff of the University of Alberta, Calgary. Consultant psychiatric services only were available to the Clinic staff until the beginning of December when a full-time psychiatrist was appointed.

No rural clinics were held as none were requested. However, many clients from the rural areas were seen at Calgary and five children, non-resident in Calgary or its suburbs, were seen for regular treatment interviews. A psychologist spent fourteen days working in Lethbridge during the period when there was no psychologist on the Lethbridge Clinic staff. In addition, several children from both Lethbridge and Red Deer Clinic areas were seen at Calgary for testing.

Calgary—281 new cases were examined (190 male and 91 female), 14 more than in 1957. 223 cases were re-registered, an increase of 52 from the previous year. The total work load increased by 724 periods to a total of 3,844, indicating that more intensive work is being done with the patients. 83.6% of the new cases were under the age of nineteen, 33.1% being between the ages of five and nine. The percentage of referrals from both the school authorities and medical practitioners increased, with approximately 21% of the new cases being referred by the schools and 15% by doctors. 30.6% were self or family referrals. Psychotherapy was recommended for 69 cases. A total of 84 mental defectives were examined during the year.

PROVINCIAL GUIDANCE CLINIC, LETHBRIDGE

J. BOWER, M.D., *Clinic Psychiatrist*

The Clinic functioned with the psychiatrist, the receptionist and the periodic assistance of a psychologist from the Guidance Clinic at Calgary. The psychologist of the Attorney General's Department continued to give some assistance also. Two summer relief staff members proved of great value to the Clinic.

The new Clinic quarters and the location of the same added to the efficiency of the Clinic.

New cases examined numbered 271. This was a slight increase. Re-registered cases totalled 123, an increase of 46 over the previous year. Interviews given by the psychiatrist, psychologists and social worker numbered 1,679.

The following table represents the area distribution of the cases seen by the Clinic:

Area	New Cases	Re-Registrations
Lethbridge	221	84
Medicine Hat	24	37
Crow's Nest Pass	10	1
Fort Macleod	7	1
Taber	9	—
TOTALS	271	123

Educational Activities—Talks were given to Service Clubs, Religious Groups, Home and School Associations, Nurses and Physicians. The psychiatrist lectured at the Banff School of Fine Arts, and for the Extension Department of the University of Alberta in its Social Work Course. Radio and television interviews were given. Mental Health Courses and demonstrations were given to the local student and graduate nurses.

The psychiatrist acted as consultant to the Provincial Gaol and Courts, and gave assistance to many local agencies. The psychiatrist also assisted by visiting the Provincial Auxiliary Mental Hospitals at Claresholm and Raymond, and examining and prescribing for the patients there.

TABLE 1
SUMMARY OF NEW AND RE-REGISTERED CASES EXAMINED, TREATMENT PERIODS, INTERVIEWS,
PSYCHOLOGICAL EXAMINATIONS, AND TOTAL WORK LOAD OF CLINICS

CLINIC DISTRICTS	NEW CASES			RE-REGISTERED CASES				DISTRIBUTION OF WORK				TOTAL WORK LOAD
	M	F	T	M	F	T		Pat.	Col.	Gen.	P.E.	
Edmonton and District.....	759	418	1177	237	154	391		3363	3817	2921	1539	11 640
Calgary and District.....	150	91	281	142	81	223		801	1662	997	801	3844
Lethbridge and District	152	79	271	70	53	123		653	634	172	220	1679
Ponoka and Red Deer District	62	51	113	29	27	56		498	188	19	47	752
TOTALS	1203	639	1842	478	315	793		5315	6301	4109	2190	17,915

Notes: Total new cases examined since the Clinics opened in 1929 is now 22,803.

Edmonton and District includes all the area served from Wetaskiwin north. It includes Clinics held in the Peace River-Grande Prairie area, and such points as Athabasca, Barrhead, Bonnyville, Holden, Lac La Biche, St. Paul, Two Hills, Vegreville, Vermilion, Wainwright, Westlock and Wetaskiwin.

Calgary and District includes the area served south of Didsbury, excluding the Lethbridge area. It includes Clinics held at such points as Didsbury, Drumheller, Cochrane, High River and Strathmore.

Lethbridge and District includes the area in the far south of the province, with Clinics held at such points as Medicine Hat, Fort Macleod, Claresholm, Cardston and the Crow's Nest Pass.

Ponoka and Red Deer District includes the area from Didsbury on the south to Wetaskiwin on the north. It includes Clinics at such points as Castor, Ponoka, Red Deer, Rimbey, Rocky Mountain House and Stettler.

Re-registered cases are those that have been examined previously at a Clinic, and are seen again for further consultation and/or treatment.

Pat.—Patient contacts including treatment periods.

Col.—Collateral, or contacts with a patient's parents, or relatives, or with others closely interested.

Gen.—General contacts regarding Clinic activities and work, including those with other Agencies and Community Services. It includes as well talks and addresses, and teaching periods by staff members.

P.E.—Psychological examinations and tests.

Total Work Load—This is the sum of the periods of work noted under each of the four headings Patient, Collateral, General and Psychological examinations.

TABLE 2
AGE AND SEX CLASSIFICATION OF NEW CLINIC CASES

AGE GROUP	EDMONTON AND DISTRICT			CALGARY AND DISTRICT			LETHBRIDGE AND DISTRICT			PONOKA AND RED DEER DISTRICT			TOTALS			PERCENTAGES		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 - 4	85	61	146	31	18	49	5	7	12	4	1	5	125	87	212	10.4	13.6	11.5
5 - 9	339	150	489	73	20	93	66	31	97	15	6	21	493	207	700	41.1	32.4	38.5
10 - 14	229	101	330	48	19	67	40	12	52	12	5	17	329	137	466	27.3	21.5	25.2
15 - 19	78	83	161	18	13	31	18	10	28	10	8	18	124	114	238	10.3	17.8	12.9
20 - 24	2	8	10	5	10	15	7	3	10	4	6	10	18	27	45	1.5	4.2	2.4
25 - 29	5	5	10	2	3	5	12	4	16	1	16	11	20	22	42	1.7	3.5	2.2
30 - 34	2	5	7	5	2	7	13	4	18	2	2	6	22	18	40	1.8	2.8	2.1
35 - 39	2	5	7	5	2	7	13	4	18	2	2	6	22	18	40	1.8	2.8	2.1
40 - 44	4	1	5	2	2	4	8	3	11	3	3	8	16	9	26	1.4	1.4	1.4
45 - 49	2	1	3	2	2	2	6	2	5	1	2	6	16	4	20	1.3	1.1	1.7
50 and over	4	1	5	2	2	2	6	1	7	4	2	6	16	4	20	1.3	1.1	1.7
Unknown	9	2	11	4	2	6	11	1	12	6	2	8	30	7	37	2.3	0.0	2.0
TOTALS	759	418	1177	190	91	281	192	79	271	62	51	113	1203	639	1842	100.0	100.0	100.0

TABLE 3A
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—PRE-SCHOOL GROUP (0 to 5 years 11 months)

Nature of Case	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Educational Problem with Adequate Intellect	20	13	33	2	2	2	8	3	11	3	3	6	22	13	35
Intellectual Inadequacy	29	28	57	26	17	43	1	1	2	2	1	3	66	48	114
Emotional Disorder	38	18	56	6	6	6	1	1	1	1	1	3	47	19	66
Thinking Disorder	2	2	2	5	5	5	5	5	5	1	1	2	28	6	34
Speech Disorder	22	6	28	5	5	5	5	5	5	1	1	2	28	6	34
Faulty Feeding Habits	1	1	2	1	1	2	1	1	2	1	1	2	1	1	3
Sleep Disturbances	1	1	2	1	1	2	1	1	2	1	1	2	3	3	6
Anti-Social Trends	1	1	2	1	1	2	1	1	2	1	1	2	3	3	6
Sexual Difficulties	4	6	10	2	2	2	2	2	2	1	1	2	4	4	8
Attack Disorders	6	3	9	2	2	2	2	2	2	1	1	2	6	6	12
Psychoneuroses	6	3	9	2	2	2	2	2	2	1	1	2	6	6	12
Psychoses	8	4	12	3	3	6	4	4	8	1	1	2	13	10	23
Non-Psychotic	2	2	4	3	3	6	1	1	2	1	1	2	3	3	6
Normal Child	2	2	4	3	3	6	1	1	2	1	1	2	3	3	6
Undiagnosed	2	2	4	3	3	6	1	1	2	1	1	2	3	3	6
TOTALS	129	82	211	50	19	69	10	13	23	9	2	11	198	116	314

TABLE 3B
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—SCHOOL AGE GROUP (6 years to 18 years 11 months)

Nature of Case	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Educational Problem with Adequate Intellect	215	73	288	30	4	34	15	3	18	3	2	5	283	82	345
Intellectual Inadequacy	72	62	134	26	12	38	32	13	45	5	3	8	135	90	225
Emotional Disorder	142	88	230	27	13	40	20	9	29	9	2	11	138	112	250
Thinking Disorder	25	11	36	3	3	6	3	3	6	2	2	4	129	41	170
Speech Disorder	24	5	29	3	1	4	3	1	4	2	2	4	32	13	45
Faulty Feeding Habits .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sleep Disturbances .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anti-Social Trends	67	24	91	12	4	16	5	.....	5	4	2	6	88	30	118
Sexual Difficulties	7	24	31	2	4	6	1	.....	1	1	1	1	10	29	39
Stark Disorders	14	8	22	1	1	2	2	1	3	1	.....	1	18	10	28
Psychoneuroses	7	6	13	9	3	12	4	1	5	1	.....	1	17	9	26
Psychoses .....	.....	1	1	3	1	4	4	1	5	.....	.....	.....	8	3	11
Non-Psychotic	9	6	15	1	1	2	1	1	2	2	2	2	10	8	18
Normal Child	11	2	13	2	.....	2	1	1	2	2	4	6	16	7	23
Undiagnosed	5	.....	5	1	2	3	34	11	45	.....	.....	.....	40	13	53
TOTALS	599	310	909	117	49	166	117	43	160	31	18	49	864	420	1284

TABLE 3C
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES—ADULT GROUP (19 years and over)

Nature of Case	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Educational Problem with Adequate Intellect	3	2	5	5	4	9	...	...	...	...	...	...	8	6	14
Intellectual Inadequacy	16	7	23	7	5	12	...	...	...	...	...	...	31	16	47
Emotional Disorder	...	...	...	1	4	5	...	...	...	...	...	...	1	3	4
Thinking Disorder	...	4	4	3	...	3	...	...	...	...	...	...	3	6	9
Speech Disorder	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Faulty Feeding Habits	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sleep Disturbances	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anti-Social Trends	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sexual Difficulties	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Attack Disorders	4	6	10	4	4	8	...	...	...	...	...	...	5	1	10
Psychoneuroses	2	...	2	1	2	3	...	...	...	...	...	...	25	28	53
Psychoses	6	6	12	2	1	3	...	...	...	...	...	...	31	14	45
Non-Psychotic	1	1	1	1	1	1	...	...	...	...	...	...	29	11	40
Normal	...	...	...	...	...	...	...	...	...	...	...	...	1	7	8
Undiagnosed	...	...	...	...	...	...	...	...	...	...	...	...	6	4	10
TOTALS—Table 3C	31	26	57	23	23	46	...	...	...	...	...	...	141	103	244
Table 3B	599	310	909	117	49	166	...	...	...	...	...	...	864	420	1284
Table 3A	129	82	211	50	19	69	...	...	...	...	...	...	198	116	314
GRAND TOTALS	759	418	1177	190	91	281	192	79	271	62	51	113	1203	639	1842

TABLE 4
SOURCES REFERRING NEW CASES TO THE CLINICS

Referring Source	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Schools and School Authorities	297	110	407	40	20	60	55	16	71	19	7	26	411	153	564
Private Doctors and Medical Clinics	123	83	206	25	18	43	29	36	65	27	26	53	204	163	367
Medical Clinics, as Rehabilitation, Cerebral Palsy, T.B., O.P.D.	30	19	49	16	8	24	7	3	10	...	...	...	53	30	83
Health Units, Medical Health Officers, Public Health Nurses	75	50	125	12	7	19	30	9	39	5	3	8	122	69	191
Child Welfare Agencies, Provincial and Municipal	30	42	72	19	7	26	5	8	13	...	...	...	54	57	111
Bale and Family Court, Juvenile Offenders	24	19	43	1	...	1	3	...	3	...	...	...	28	19	47
British Columbia Institution	4	2	6	...	...	...	48	...	48	2	2	...	54	4	58
Provincial Courts, Adult Courts	132	68	200	61	25	86	12	6	18	6	10	16	211	109	320
Parents, Relatives, Friends, and Self	24	6	30	1	1	2	3	1	4	...	...	...	28	7	35
Department of Public Health	20	19	39	15	6	21	...	...	...	3	3	6	38	28	66
Other Sources .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	759	418	1177	190	91	281	192	79	271	62	51	113	1203	639	1842

NOTES: Provincial and Municipal Welfare Agencies will include Provincial and Civic Child Welfare or Children's Aid Department, and Voluntary or Private Welfare Agencies, such as those supported by a Community Chest, Service Clubs, and protective Homes.

T.B.—Tuberculosis; O.P.D.—Outpatient Department of a Hospital.

M—Male F—Female T—Totals

TABLE 5
MAJOR RECOMMENDATIONS MADE IN REGARD TO NEW CLINIC CASES

Recommendations	Edmonton and District			Calgary and District			Lethbridge and District			Ponoka and Red Deer District			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Admission to:															
(a) Mental Hospital	2	3	5	2	2	4	26	9	35	...	1	1	30	15	45
(b) Provincial Training School	22	15	37	20	12	32	18	10	28	8	2	10	68	39	107
Placement in:															
(a) Protective or Correctional Home or Institution	21	16	37	...	...	...	...	...	...	...	...	...	21	16	37
(b) Foster Home	15	3	18	...	...	...	2	1	3	1	...	1	18	4	22
Educational Advice:															
(a) Modified School Program or Special Class Placement	191	70	261	6	3	9	32	5	37	4	2	6	233	80	313
(b) Vocational Counselling	19	7	26	3	4	7	...	...	...	...	...	...	22	12	34
(c) Other	85	45	130	10	2	12	2	3	5	2	2	4	99	52	151
Modified Home Management	118	72	190	41	13	54	24	10	34	16	4	4	20	199	298
Referred for Medical Treatment	74	43	117	14	14	28	18	9	27	9	8	17	115	74	189
Treatment in Guidance Clinic	135	88	223	48	21	69	4	3	7	11	15	26	198	127	325
Other Recommendations	77	56	133	46	20	66	66	29	95	11	16	27	200	121	321
TOTALS	759	418	1177	190	91	281	192	79	271	62	51	113	1203	639	1842

TABLE 6
SUMMARY OF THE NUMBER OF MENTAL DEFECTIVES EXAMINED, BY YEARS

Year	I. Q. 0 to 25 Probably Idiots			I. Q. 26 to 50 Probably Imbeciles			I. Q. 51 to 75 Probably Morons			I. Q. Unknown. Mental Deficiency Indicated			Totals			Percentage Of New Cases	Cumulative Totals
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
1946	2	2	4	16	13	29	40	43	83	9	6	15	67	67	134	134	1887
1947	3	1	4	28	14	42	77	48	125	19	14	33	127	77	204	204	2001
1948	6	8	14	34	33	67	86	47	133	24	12	36	150	108	258	258	2205
1949	3	4	7	27	29	56	54	63	117	9	7	16	93	108	201	201	2453
1950	13	20	33	44	40	84	148	80	228	21	6	27	207	168	375	375	2851
1951	7	13	20	33	35	68	85	70	155	3	6	9	128	124	252	252	2998
1952	7	4	11	36	31	67	114	94	208	4	2	6	161	131	292	292	3350
1953	6	4	10	30	39	69	102	68	170	19	7	26	157	118	275	275	3817
1954	3	4	7	42	43	85	125	93	218	13	12	25	183	152	335	335	4152
1955	5	3	8	54	40	94	127	95	222	30	17	47	216	155	371	371	4523
1956	7	5	12	65	46	111	146	88	234	27	21	48	245	160	405	405	4928
1957	11	13	24	40	32	72	115	86	201	18	23	41	184	154	338	338	5266
1958	16	11	27	38	29	67	119	80	199	24	27	51	197	147	344	344	5610

Notes: I. Q.—Intelligence Quotient

M—Male

F—Female

T—Totals

ACTIVE TREATMENT MENTAL HOSPITALS

THE PROVINCIAL MENTAL HOSPITAL, PONOKA

THE PROVINCIAL MENTAL INSTITUTE, EDMONTON

The Provincial Mental Hospital, Ponoka, admitted 735 patients (including re-admissions). The Provincial Mental Institute, Edmonton, admitted 924 patients (including re-admissions). The total number of admissions (including re-admissions) was 131 greater than the previous year. This increase in admissions (131) approximated the figure which had been usual for many years. The Provincial Mental Institute admitted 136 remand cases, whereas the Provincial Mental Hospital admitted 23. The trend of the Provincial Mental Institute to admit more cases again continued and the situation appeared definitely related to the great number of remand cases admitted to the Provincial Mental Institute.

The discharge rate of the two hospitals was approximately 80 per cent of the admission rate.

Continued beneficial results were reported from the use of the tranquillizing drugs. Other therapies such as group, occupational and recreational, must also be given due credit. Both the Provincial Mental Hospital and the Provincial Mental Institute, reported reduced use of electro convulsive therapy as a result of the extensive use of the tranquillizers.

The patient populations of both the Active Treatment Hospitals were reduced as a result of the transfer of Mentally Deficient patients to Deerhome at Red Deer, and senile patients to Rosehaven, Camrose. During the year the Provincial Mental Hospital, Ponoka, transferred 145 patients (Male 81, Female 64), and the Provincial Mental Institute, Edmonton, transferred 110 patients (Male 58, Female 52) to Deerhome. The Provincial Mental Hospital, Ponoka, transferred 43 patients (Male 29, Female 14), and the Provincial Mental Institute, Edmonton, transferred 46 patients (Male 23, Female 23) to Rosehaven, Camrose. Another factor in the reduction of the patient populations of the Active Treatment Hospitals was the high rate of discharge.

The "open-door" policy for both Hospitals was pursued.

The Nursing Staff training programs have continued. Ten students completed the combined Course of General and Psychiatric Nursing at the Provincial Mental Hospital, Ponoka. For the first time in the history of the School, one of the graduating class was a man. Four male students completed the three-year Course at the Provincial Mental Hospital, Ponoka, and 14 (8 men and 6 women) at the Provincial Mental Institute, Edmonton. Both Hospitals gave instruction to Affiliate Nursing Students from the General Hospitals of the Province.

TABLE 1
TABULATED SUMMARY—INSTITUTIONS—MOVEMENT OF POPULATION

Institutions	Patients in Hospital December 31st, 1957			Admissions (Excluding Transfers)			Discharges			Deaths			Patients in Hospital December 31st, 1958		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
ACUTE MENTAL HOSPITALS															
P.M.H., Ponoka	921	602	1523												
P.M.I., Edmonton	1036	507	1543	400	335	735	326	264	590	50	30	80	836	542	1378
				538	386	924	440	273	713	65	27	92	973	461	1434
Total	1957	1109	3066	938	721	1659	766	537	1303	115	57	172	1809	1003	2812
CHRONIC MENTAL HOSPITALS															
Rosethaven, Camrose	284	217	501	*52	*37	*89	3	2	5	51	33	84	281	214	495
P.A.M.H., Claresholm .....	...	96	96	...	10	10	...	7	7	...	...	...	...	98	98
P.A.M.H., Raymond .....	...	133	133	...	33	33	...	27	27	...	7	7	...	132	132
Total	284	446	730	52	80	132	3	36	39	51	40	91	281	444	725
INSTITUTIONS FOR MENTAL DEFECTIVES,															
RED DEER															
Provincial Training School	395	312	707	84	102	186	43	21	64	4	8	12	402	356	758
Deerhome .....	...	...	...	*186	*169	*355	1	4	5	1	1	2	175	160	335
Total	395	312	707	270	271	541	44	25	69	5	9	14	577	516	1093
Grand Total	2636	1867	4503	1260	1072	2332	813	598	1411	171	106	277	2667	1963	4630

*All Admissions by Transfer from Other Alberta Mental Hospitals.

TABLE 2
FIRST ADMISSIONS

DIAGNOSTIC CLASSIFICATION	Male	Female	Total
Syphilis with Psychosis	3	1	4
Schizophrenia (All Categories)	150	113	263
Manic Depressive (All Categories)	19	28	47
Involuntary Psychoses	15	21	36
Paranoid Conditions	28	12	40
Senile Psychosis	50	39	89
Pre-Senile Psychosis	2	3	5
Psychosis with Cerebral Arteriosclerosis	60	31	91
Alcoholic Psychosis	24	2	26
Psychosis of Other Demonstrable Etiology	13	4	17
Other and Unspecified Psychoses	20	25	45
Anxiety Reaction	10	13	23
Hysterical Reaction	4	3	7
Obsessive Compulsive Reaction .....	.....	1	1
Neurotic Depressive Reaction	28	21	49
Somatic Reaction	1	.....	1
Other and Unspecified Psychoneurotic Reactions	6	13	19
Pathological Personality (All Categories)	83	21	104
Immature Personality	12	9	21
Alcoholism Without Psychosis	70	10	80
Mental Deficiency Without Psychosis	17	19	36
Syphilis Without Psychosis	2	.....	2
Primary Behaviour Disorders	10	12	22
Other and Unspecified Disorders of Character, Behaviour and Intelligence	6	9	15
Epilepsy	6	9	15
Mental Observation Without Need for Psychiatric Care	12	3	15
Puerperal Psychosis .....	.....	1	1
Other Non-Psychiatric Conditions	9	.....	9
TOTALS	660	423	1083

TABLE 3 — TABULATED SUMMARY OF DEATHS IN INSTITUTIONS DURING 1958

DISEASE	P.M.H., Ponoka			P.M.I., Edmonton			P.A.M.H., Claresholm			P.A.M.H., Raymond			Rosehaven Camrose			P.T.S., Red Deer			Deerhorne, Red Deer			TOTALS		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
1. Tuberculosis of Respiratory System	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
2. Syphilitic and Sequelae	4	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
3. All Other Diseases Classified as Infective and Parasitic	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17. All Other Diseases Classified as Infective and Parasitic	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18. Neoplasms Malignant	...	3	...	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
20. Diabetes Mellitus	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	6	10
22. Vascular Diseases of Central Nervous System	3	1	4	32	8	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...
26. Arteriosclerotic and Degenerative Heart Disease	6	12	18	20	5	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38	18	56
27. Other Diseases of the Heart	5	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43	23	66
28. Hypertension with Heart Disease	...	1	1	...	2	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	7	4	11
31. Pneumonia	12	10	...	...	2	...	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...	7	3	3
33. Ulcer of Stomach and Duodenum	1	...	...	1	1	3	...	...	...	2	2	42	...	...	...	...	...	...	...	...	...	43	32	75
35. Intestinal Obstruction and Hernia	...	...	...	1	1	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	2	1	3
37. Cirrhosis of the Liver	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
38. Nephritis and Nephrosis	...	...	...	1	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
41. Congenital Malformations	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...
43. Senility	9	2	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	4	1
45. All Other Diseases	5	...	...	3	4	7	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	9	2	11
46. All Other Diseases	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	8	17
49. Suicides and Self-Inflicted Injury	1	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3
GRAND TOTALS	50	30	80	65	27	92	...	...	...	7	7	84	...	...	...	4	8	12	1	1	2	171	106	277

PROVINCIAL MENTAL HOSPITAL, PONOKA

T. C. MICHIE, M.D., *Medical Superintendent*

PATIENT POPULATION CHANGES

There were 1,523 patients in residence on January 1st, 1958, and of these, 921 were male, and 602 female. On December 31st, 1958, the number in residence was 1,378, of whom 836 were male, and 542 female. This was an overall reduction of 145. The details are as set out in Table 1.

ADMISSION OF PATIENTS

There were 735 patients admitted, exclusive of transfers from other Provincial Mental Institutions, of whom 400 were male, and 335 female. This was an increase of 43 over the previous year.

40 per cent of the patients admitted under "The Mental Diseases Act" were by Warrant, 28 per cent by Medical Certificates, and 32 per cent by Voluntary Application.

29 patients were received by transfer. There was no increase in the number admitted with senile disorders.

SEPARATION OF PATIENTS

590 patients were discharged, of whom 326 were male, and 264 female. This was an increase of 20 over the previous year, and indicates that 80 per cent of the number admitted during the year were discharged. 243 patients were transferred to other Mental Institutions within the Province. 80 patients died, this being a slight increase over the previous year.

ACCIDENTS AND ELOPMENTS

23 patients suffered from fractures, eight being men, and 15 women. In nearly all instances, these were among the aged.

There was one suicidal death.

There was a slight increase in the number of patients who left the Hospital without permission. This was probably due to the much larger number of patients who had grounds privileges. This increase, however, was negligible, and did not give reason to interfere with the program of gradually opening Hospital wards.

GENERAL HEALTH OF PATIENTS

The general health of patients throughout the year was good. There were no epidemics.

Three men were transferred to the Tuberculosis Unit at the Provincial Mental Institute, Edmonton.

CLINICAL WORK

During the year, there was observed a gradual evolution in methods of therapy. Tranquilizing drugs were used extensively

and electroconvulsive treatment reduced to about one-quarter of that administered several years ago. Insulin-shock therapy was utilized as before. Group therapy in a variety of forms was made available to large numbers of patients. One-half of all wards were operated with open doors. Restrictive measures were reduced to a considered safe minimum, ever keeping in mind the welfare of the patients, and the responsibility of the Hospital to the public.

OCCUPATIONAL THERAPY

There was no lessening of emphasis in this form of treatment, and it was necessary to effect correlation between formal occupational activities, and functioning of groups of patients from continued treatment wards, led by nursing personnel. The latter groups frequently undertook specially chosen outside work projects.

Group occupational activities became extremely varied, and to give an example — last year one group of female patients successfully catered to the Dinner of the District Medical Society Meeting held at the Hospital, and handled all business arrangements themselves, including the purchase of the necessary supplies.

The Library gave good service to the patients. There was a great increase in the quantity of magazines donated by interested individuals and organizations.

The Canteen continues to operate successfully, with patient help. A large percentage of the revenue was used for the purchase and maintenance of television equipment, and musical instruments.

RECREATIONAL THERAPY

This Department was operated with efficiency. It was found that with greater freedom extended to patients, there tended to be more spontaneously organized recreation among the patients themselves. All patients had access to television programs. It was felt this kept them much better informed as to current events.

RELIGIOUS SERVICES

As in previous years, religious services were held each week at the Hospital. The Visiting Clergy showed a keen interest in the needs of the patients. They were given complete access to the Hospital, and encouraged to consult the Medical and Nursing Staff as occasion arose. Many patients attended religious services in the Town of Ponoka.

SOCIAL SERVICES—SOCIAL WORKER

The Social Worker resigned during the year, and was replaced by a female, a Graduate Nurse with Psychiatric training. A distance in excess of 10,000 miles was travelled by the worker, and almost 300 calls were made throughout the southern half of the Province. Most of these were concerned with after-care of patients, but on occasions prospective patients and their relatives

were interviewed. The Social Worker assisted with the interviewing of patients and relatives, while at the hospital, and took part in group therapy.

SOCIAL SERVICES — PSYCHOLOGIST

The hospital was without the services of a Psychologist for the first four months of the year. During this time, urgent cases were tested by one of the Medical Staff, who had special training in this field. The former Psychologist, who had resigned her position to attend University, was re-appointed on May 1st. Psychological tests were administered to over 20 per cent of all patients admitted during the year. The Psychologist also took an active part in group therapy and conducted aptitude and intelligence tests on Student Nurses.

DENTAL SERVICES

A very efficient dental service was provided to all patients requiring care. New dental X-ray equipment was installed and proved to be a help in diagnosis. The Dentist continued to supply services to the patients in the Provincial Auxiliary Hospitals at Claresholm and Raymond.

X-RAY SERVICES

There has been a gradual increase in the work in this Department. During the year, almost 4,400 examinations were made. An Assistant Technician was employed in the X-Ray Department on November 1st. All chest plates were referred to the Medical Staff of the Baker Memorial Sanatorium, Calgary, for interpretation; and other films were sent to Specialists in Calgary, Edmonton and Red Deer for reading, when the necessity arose.

LABORATORY SERVICES

The Laboratory provided adequate facilities for diagnostic work. It was necessary, in only very rare instances, to seek the aid of the University Laboratory, or the Provincial Laboratories, except for the routine examination of tissues from the operating rooms, and serological examinations for syphilis. Some new equipment was acquired to facilitate post-mortem examinations. All Electroencephalographic tracings were interpreted by an Edmonton Neurologist.

SCHOOL OF NURSING

There were only minor changes in the Teaching program. The Teaching Staff consisted of six full-time Instructors. Twenty students were in residence and received instruction in the four-year Course in General and Psychiatric Nursing. Eighteen students in the same Course were away at affiliating Schools of Nursing in General Hospitals. Ten students successfully completed the Course, and subsequently passed the examination for registration. For the first time in the history of the School, one of the graduating students was a man. It was also noted he had the distinction of being the first man to ever graduate from a School of Nursing in Alberta.

The School of Nursing of this Hospital was one of 25 chosen across Canada to participate in a pilot project by the Canadian Nurses' Association, to arrive at standards for the evaluation of Schools of Nursing. The preliminary work in the survey was carried out in 1958.

Twenty-two male students were enrolled in the three-year Psychiatric Course. Four students completed this Course and received Certificates.

Instruction was given to affiliating students from General Hospitals' Schools of Nursing. The period of affiliation was eight weeks, and the number in attendance at any one time approximately 20. There was an indication this Course had stimulated interest in Psychiatric Nursing, since in 1958, seven Nurses who previously affiliated here, returned for further study, and five others joined the General Duty Staff.

There were two classes of Post-Graduate Nurses, one starting on February 1st and the other on October 1st. Thirteen completed the Course during the year and received Certificates in Psychiatric Nursing.

Eight students, enrolled in the Diploma Course in Public Health Nursing at the University of Alberta, spent two weeks at the Hospital for field experience, under the direction of the School of Nursing.

Certified Nursing Aides joining the Staff were given instruction in some of the principles of Psychiatric Nursing.

A more prolonged indoctrination course was given to newly-appointed Ward Aides.

NURSING SERVICES

New nursing techniques, coupled with changing methods of therapy, led in turn to the need for further modification and elaboration in nursing procedures. With increasing activity, and accessibility of patients to normal social contacts, the Nurse found her role much more interesting, but also more complicated than when much of her effort was directed to custodial duties. It was very obvious that the improved social standards on wards called for more rather than less nursing care. The Nursing Staff met the new responsibilities adequately.

VISITORS

Every encouragement was given for the visiting of patients by relatives and close friends. There were morning and afternoon visiting periods every day of the year. By special arrangements, a number of groups visited the Hospital, from points as far distant as Calgary.

Inspections of the Hospital were made, from time to time, by the Minister of Health, Dr. J. Donovan Ross, and also by Dr. A. Somerville, Deputy Minister of Health.

Dr. R. R. MacLean, the Director of the Division of Mental Health, on many occasions toured the Hospital, and was kept fully informed as to all treatment procedures.

The Visiting Board conducted its annual survey in October, and as usual made exhaustive inquiry as to the care of the patients.

A number of organizations in the community took an active interest in the patients' welfare, and assisted in recreational and other activities of the patients.

The Executive Secretaries of the Canadian Mental Health Associations from Calgary and Edmonton made a number of visits in connection with possible plans of that organization for the assistance in rehabilitation of discharged patients.

Miss Jean Dorgan, Consultant in Social Work to the Mental Health Division, Department of National Health and Welfare, Ottawa, visited the Hospital in August.

THE EUGENICS BOARD

The Eugenics Board held four meetings at the Hospital during the year. Twelve male and 13 female patients, or a total of 25, were presented to the Board. Twenty-four male and 13 female, a total of 37 patients were sexually sterilized at the Hospital during 1958, of whom 11 were referred from the Provincial Training School, Red Deer.

SURGICAL SERVICES

Surgical services were in the main rendered by the two regularly appointed Consultants from Red Deer and Edmonton. During the year there was an increasing utilization of the services of Specialists, in the various fields, from Calgary and Edmonton, and also of Surgeons from the Town of Ponoka.

HOUSEKEEPING DEPARTMENT

This Department continued to function efficiently. Everything possible was done to make the wards comfortable for the patients and attractive in appearance.

FIRE PROTECTION

There was no change during the year in the fire protection policy. Equipment was well maintained. The Fire Brigade was fully staffed. Periodic practices were held.

In October, a fire broke out in one of the farm piggeries. It was brought under control before any great damage occurred.

NEW BUILDINGS AND EQUIPMENT

A Physician's residence was completed and occupied early in the year.

Two open verandahs were closed on the male reception building. The construction was commenced, but not completed, on an

addition to Male 12 building, to increase day-room and toilet facilities.

An addition to the recreational hall was completed. This work was begun in 1957. It has proved to be of great advantage in all patients' recreational activities.

The construction was commenced on a new Nurses' Home, to accommodate 60 Student Nurses.

All main corridors were wired so that floor polishing could be done by machines.

A proper automobile parking area for the use of Staff was established in a suitable central location.

BUSINESS OFFICE

This Department operated with its usual efficiency. The Business Manager retained responsibility for the supervision of the ancillary services.

PROVINCIAL MENTAL HOSPITAL FARM

The farm had a suitable yield. The field crops were of good quality and quantity. There was an increase in the dairy herd, and in the deliveries of milk to the Hospital. The cattle were free of infection. The production of pork and poultry products adequately met the Hospital needs.

ANCILLARY SERVICES

In general, the Hospital Departments, including the Laundry, Linen Room, Print Shop, Sewing Room, Shoe Shop and Tailor Shop, provided satisfactory services.

THE DEPARTMENT OF PUBLIC WORKS

Maintenance Department

There was a major administrative change in policy on April 1st, when the Department of Public Works undertook full responsibility for the maintenance of buildings. That Department also allocated responsibility to the Maintenance Supervisor of all its services, except the production of heat, power, water supply and sewage disposal. Routine maintenance jobs were given proper attention. Many new lighting fixtures were installed. A great deal of progress was made in the painting of the exteriors of older Hospital buildings.

Mechanical Branch

This Department, under the direction of the Chief Engineer, provided an adequate supply of heat, light and water to the buildings.

CONCLUSION

It became apparent during the year that changing methods of treatment and patient management were bringing about a decidedly different pattern in Mental Hospital care. Newly admitted and seriously disturbed patients became receptive more rapidly to what might be considered normal living conditions. To a greater or lesser degree, this same tendency was apparent in long-stay patients. This necessitated a re-orientation in many ways if the basic requirements of patients were to be met. It implied, among other things, consideration being given to actual housing, the type of clothing to be worn, and the service of food.

The use of tranquilizing drugs greatly reduced the need of electroshock therapy. The slight increase in admissions was probably in keeping with the population rise in the area served by the Hospital.

Those responsible for the Hospital administration are most grateful for the direction and advice given by the senior officers of the Department of Public Health.

TABLE 1
PROVINCIAL MENTAL HOSPITAL, PONOKA, ALBERTA

MOVEMENT OF THE PATIENT POPULATION DURING THE YEAR 1958

	M			F			T		
In residence as of December 31st, 1957	921	602	1523						
On Leave or otherwise absent	18	34	52						
On books as of December 31st, 1957	939	636	1575						
ADMISSIONS:									
First admissions:	M	F	T	M	F	T			
Voluntary	55	48	103						
Certificates	57	64	121						
Warrant	153	57	210						
M.D. Act	1	3	4						
				266	172	438			
Re-admissions:									
Voluntary	49	64	113						
Certificates	22	47	69						
Warrant	62	48	110						
M.D. Act	1	4	5						
				134	163	297			
Totals	400	335	735						
Transfers in	8	21	29						
							408	356	764
							1347	992	2339
SEPARATIONS:									
Discharges:									
Recovered	94	83	177						
Improved	129	141	270						
Unimproved	11	8	19						
Not Psychotic	92	32	124						
				326	264	590			
Deaths				50	30	80			
Transfers out				117	126	243			
							493	420	913
On books as of December 31st, 1958	854	572	1426						
On Leave or otherwise absent	18	30	48						
In residence as of December 31st, 1958	836	542	1378						

TABLE 2
PROVINCIAL MENTAL HOSPITAL, PONOKA, ALBERTA
RESIDENT PATIENT POPULATION BY PSYCHOSES—December 31st, 1958

CLASSIFICATION	Male	Female	Total
Syphilis with Psychosis	44	8	52
Schizophrenia	467	293	760
Manic Depressive	45	54	99
Involuntional Psychosis	5	13	18
Paranoid states	68	41	109
Senile Psychosis	16	21	37
Pre-senile Psychosis	4	5	9
With Cerebral Arteriosclerosis	19	22	41
Alcoholic Psychosis	21	4	25
Other and Unspecified	88	46	134
Anxiety state	1	2	3
Hysteria .....	...	1	1
Obsessive Compulsive	2	5	7
Neurotic Depressive	2	4	6
Other Psychoneurotic states	14	2	16
Pathological personality	7	1	8
Alcoholism	20	11	31
Mental Deficiency	3	1	4
Epilepsy	1	4	5
Unspecified character disorders	3	...	3
Mental observation without need for further medical care	1	1	2
Syphilis without psychosis	5	1	6
Other non-psychiatric conditions .....	...	...	...
TOTALS	836	542	1378

TABLE 3
PROVINCIAL MENTAL HOSPITAL, PONOKA, ALBERTA
FIRST ADMISSIONS DURING 1958 BY PSYCHOSES

CLASSIFICATION:	Male	Female	Total
Schizophrenia	48	39	87
Manic Depressive	10	8	18
Involuntional	6	11	17
Paranoid states	17	8	25
Senile Psychosis	29	20	49
Pre-senile Psychosis	2	...	2
With Cerebral Arteriosclerosis	25	8	33
Alcoholic Psychosis	20	2	22
Other and unspecified	15	20	35
Anxiety states	5	6	11
Hysterical states	2	2	4
Obsessive Compulsive .....	...	...	...
Neurotic Depressive	13	9	22
Other Psychoneurotic states	3	6	9
Pathological personality	23	9	32
Alcoholism	18	5	23
Mental Deficiency	7	7	14
Epilepsy	2	1	3
Primary behaviour disorders	4	...	4
Other and unspecified disorders	4	9	13
Syphilis without Psychosis	1	...	1
Mental observation without need for medical care	3	...	3
Other non-psychiatric conditions	9	...	9
TOTALS	266	172	438

TABLE 4
PROVINCIAL MENTAL HOSPITAL, PONOKA, ALBERTA
NATIVITY OF THE FIRST ADMISSIONS DURING 1958

Birthplace	Male	Female	Total
Canada	164	122	286
China	2	...	2
Czechoslovakia	4	...	4
England	23	12	35
Finland	1	1	2
Germany	6	3	9
Holland	4	1	5
Hungary	6	3	9
Ireland	7	2	9
Italy	3	1	4
Norway	4	3	7
Poland	4	1	5
Roumania	2	1	3
Russia	2	2	4
Scotland	8	11	19
Sweden	2	...	2
United States	12	5	17
Ukraine	2	1	3
Wales	5	...	5
Other countries	5	3	8
TOTALS	266	172	438

TABLE 5
PROVINCIAL MENTAL HOSPITAL, PONOKA, ALBERTA
AGE OF FIRST ADMISSIONS DURING 1958

Age	Male	Female	Total
Under 15 years	5	1	6
15 to 19 years	14	12	26
20 to 24 years	24	15	39
25 to 29 years	26	13	39
30 to 34 years	29	16	45
35 to 39 years	29	25	54
40 to 44 years	24	15	39
45 to 49 years	21	14	35
50 to 54 years	10	13	23
55 to 59 years	14	7	21
60 to 64 years	10	8	18
65 to 69 years	13	4	17
70 to 79 years	25	15	40
80 years and over	22	14	36
TOTALS	266	172	438

TABLE 6
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
DISCHARGES BY PSYCHOSIS AND CONDITION ON DISCHARGE

CLASSIFICATION	Recovered		Improved		Un- changed		Not Psy.		Totals		
	M	F	M	F	M	F	M	F	M	F	T
Schizophrenia	33	39	69	53	3	.....	.....	.....	105	92	197
Manic Depressive	15	18	6	18	1	.....	.....	.....	22	36	58
Involuntional	3	4	4	23	.....	1	.....	.....	7	28	35
Paranoid states	2	1	13	14	2	.....	.....	.....	17	15	32
Senile Psychosis	.....	1	.....	1	.....	1	.....	.....	.....	3	3
With Cerebral Arteriosclerosis	2	.....	3	2	.....	1	.....	.....	5	3	■
Alcoholic Psychosis	21	2	3	3	.....	.....	.....	.....	24	5	29
Other and unspecified	10	10	13	8	2	3	.....	.....	25	21	46
Anxiety states	1	1	7	6	1	.....	.....	.....	9	7	16
Hysteria	1	.....	2	2	1	.....	.....	.....	4	2	6
Neurotic Depressive reactions	6	6	7	6	.....	.....	.....	.....	13	12	25
Other Psychoneurotic reactions	.....	1	2	5	1	2	.....	.....	3	8	11
Pathological personality	.....	.....	.....	.....	.....	.....	24	11	24	11	35
Alcoholism	.....	.....	.....	.....	.....	.....	30	5	30	5	35
Drug addiction	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1
Mental Deficiency	.....	.....	.....	.....	.....	.....	10	8	10	8	18
Epilepsy	.....	.....	.....	.....	.....	.....	4	1	4	1	5
Primary behaviour disorders	.....	.....	.....	.....	.....	.....	4	.....	4	.....	4
Other and unspecified	.....	.....	.....	.....	.....	.....	5	6	5	6	11
Mental observation without need for further medical care	.....	.....	.....	.....	.....	.....	10	.....	10	.....	10
Other non-psychiatric conditions	.....	.....	.....	.....	.....	.....	4	1	4	1	5
TOTALS	94	83	129	141	11	8	92	32	326	264	590

TABLE 7
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
DISCHARGES BY PSYCHOSIS AND DURATION OF RESIDENCE

CLASSIFICATION	Under 3 months		Under 6 months		Under 1 year		Over 1 year		Totals		
	M	F	M	F	M	F	M	F	M	F	T
Schizophrenia	37	47	25	22	14	7	29	16	105	92	197
Manic Depressive Psychoses	11	24	2	6	4	4	5	2	22	36	58
Involuntional Psychoses	3	17	4	8	.....	.....	.....	3	7	28	35
Paranoid Conditions	6	5	6	6	2	2	3	2	17	15	32
Senile Psychoses	.....	.....	.....	1	.....	.....	.....	1	.....	3	3
With Cerebral Arteriosclerosis	2	.....	1	1	1	1	.....	1	.....	3	■
Alcoholic Psychosis	18	4	3	1	.....	.....	3	.....	24	5	29
Other and unspecified	8	18	8	.....	2	1	7	2	25	21	46
Anxiety states	7	5	1	1	.....	1	1	.....	9	7	16
Hysteria	3	2	1	.....	.....	.....	.....	.....	4	2	6
Neurotic depressive	11	10	2	2	.....	.....	.....	.....	13	12	25
Other Psychoneurotic states	3	5	.....	2	.....	1	.....	.....	3	8	11
Pathological personality	21	9	3	1	.....	.....	.....	1	24	11	35
Alcoholism	21	4	■	1	1	.....	.....	.....	30	5	35
Drug addiction	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Primary behaviour disorders	3	.....	1	.....	.....	.....	.....	.....	4	.....	4
Mental Deficiency	6	6	1	1	.....	.....	3	1	10	■	18
Epilepsy	2	.....	1	.....	1	1	.....	.....	4	1	5
Other and unspecified disorders	5	5	.....	1	.....	.....	.....	.....	5	6	11
Mental observation without need for further medical care	10	.....	.....	.....	.....	.....	.....	.....	10	.....	10
Other non-psychiatric conditions	4	1	.....	.....	.....	.....	.....	.....	4	1	5
TOTALS	182	162	67	54	25	19	52	29	326	264	590

TABLE 8
PROVINCIAL MENTAL HOSPITAL—PONOKA, ALBERTA
CAUSES OF DEATH DURING 1958
ABRIDGED INTERNATIONAL CLASSIFICATION

CLASSIFICATION	Male	Female	Totals
3. Syphilis and sequelae	4	...	4
18. Malignant neoplasms	1	3	4
20. Diabetes Mellitus	2	...	2
22. Vascular Lesions affecting C.N.S.	3	1	4
26. Arteriosclerosis and degenerative heart disease	6	12	18
27. Other diseases of the heart	5	1	6
28. Hypertension with Heart Disease .....	...	1	1
31. Pneumonia	12	10	22
33. Ulcer of Stomach and duodenum	1	...	1
37. Cirrhosis of the liver	1	...	1
45. Senility, etc., and ill-defined causes	9	2	11
46. All other diseases	5	...	5
49. Suicide and self-inflicted injury	1	...	1
TOTALS	50	30	80

TABLE 9
DEATHS BY PSYCHOSES

Syphilis	4	...	4
Schizophrenia	4	2	6
Manic Depressive	1	2	3
Involuntal	1	...	1
Paranoid Conditions	2	1	3
Senile Psychosis	16	11	27
Pre-senile .....	...	2	2
With Cerebral Arteriosclerosis	12	7	19
Alcoholic Psychosis	1	1	2
Psychosis with other demonstrable etiology	3	2	5
Psychoneurotic disorders	1	...	1
Pathological personality	1	...	1
Chronic Alcoholism	2	...	2
Mental Deficiency	2	...	2
Epilepsy .....	...	1	1
Not Psychotic .....	...	1	1
TOTALS	50	30	80

PROVINCIAL MENTAL INSTITUTE, EDMONTON

A. D. MACPHERSON, M.D., *Medical Superintendent*

PATIENT POPULATION CHANGES

On December 31, 1957, there were in residence 1,036 males and 507 female patients, a total of 1,543. The number in residence December 31, 1958, were 973 male and 461 female, a total of 1,434. This was a decrease of 212. The details are set out in Table 1.

ADMISSION OF PATIENTS

During the year, 538 men and 386 women were admitted, a total of 924. In addition, four men and eight women were transferred from other Mental Institutions in Alberta, making a total for the year of 542 men and 394 women admitted. Total admissions for the year from all sources was 936, being an increase over the previous year of 100 admissions. Admissions by Voluntary application 332; by Medical Certificates 361; by Warrant 321; and 10 were admitted under the Mental Defectives Act.

SEPARATION OF PATIENTS

During the year, 440 men and 273 women — a total of 713 — were discharged. This is an increase over the previous year of 25. In addition, 88 men and 81 women were transferred to other

Mental Institutions, a total of 169. There were 92 deaths, 67 being associated with old age; 66 autopsies were performed. The total number of separations during the year was 974. During the year, more than 1,700 patients were out on leave for a period of longer than 24 hours.

GENERAL HEALTH

This has been good during the year. There were no epidemics. T.A.B. immunization was carried out on all admissions and new staff. Chest X-Rays were done on all admissions and new staff, also a complete re-survey of all patients and staff.

CLINICAL WORK

During the past year there continued to be an increase in the use of various tranquilizing drugs. The results continued to be very gratifying. New preparations, as they are developed, are obtained and tested, with the result that we find that many of the newer preparations are helpful in conditions that previously proved to be resistant. There has been a marked improvement especially in the continued treatment group, who are now much more accessible to therapy, both psycho and recreational, and many of these patients have been discharged on continued doses. There is a further decrease in both Insulin and Electric Shock treatment. Approximately one-half the patients have the privilege of being out and around the grounds by themselves. Practically all the remaining patients are allowed out accompanied by nursing staff.

OCCUPATIONAL THERAPY

This Department remains very active. Programs are carried out in most of the wards, as well as at the Occupational Therapy Building. Average daily attendance is over 200. All patients on acute treatment attend, as well as large numbers of those on continued treatment.

SOCIAL SERVICES

The work in this field has developed extensively. The aspects that are of particular interest to us are in the investigation of family background, rehabilitation of discharged patients, and in public relations. This work is increasing constantly.

RECREATIONAL PROGRAM

The full-time program has continued. This covers all wards, and almost all forms of recreational activity. The recreational activities begin in the forenoon and continue through until evening daily. The D.V.A. has continued to assist us in providing stage shows, tickets to many activities in the city, etc. During the year, groups of volunteers from the Canadian Mental Health Association continued to take part in the patients' dances, and in addition, visiting groups from the same association have begun a program of ward visiting. The United Church has also developed a program of visiting and during the year, made regular visits to a number of wards. The Canteen has continued to function very successfully. Profits were used to provide articles such

as television sets, etc. The Canteen is used by both patients and staff.

RELIGIOUS SERVICES

The Lutheran Minister has continued his very helpful program. He holds services every Sunday and brings out choirs, singing groups, etc. Roman Catholic services are held every Sunday. Anglican and United Churches provide services on alternate Sundays. The Jewish and Ukrainian women's organizations visit frequently. The Chinese Benevolent Association also visits the hospital frequently.

LIBRARY

This Department has remained very active during the year. It is open daily and is in constant use.

BEAUTY PARLOR

This Department has remained very active. The number of patients attending daily has increased.

DENTAL SERVICES

This Department continued to operate with its usual efficiency during the year. The dentist also supplied services to Rosehaven Hospital, Camrose. All patients were examined during the year, and wherever required treatment was carried out. All new admissions were also examined. In addition, the dentist also held clinics for dental students at the University of Alberta. A total of 3,621 treatments were carried out during the year; 1,584 patients required treatment.

X-RAY SERVICES

This Department has continued operating in its usual efficient manner. A total of 5,606 examinations were carried out. This is approximately 80 less than were done in the previous year. In addition, this Department carried out Short Wave Diathermy treatments, and also the Tuberculin tests and B.C.G. vaccinations were handled by this Department.

LABORATORY SERVICES

The usual large number of examinations was carried out. A total of 16,556 tests were made, an approximate increase of 3,000 over the previous year. Both Laboratory and X-Ray Departments assisted in the training given to technicians from the school operated by the Department of Health, students being sent here for two-week periods of instruction.

SURGICAL SERVICES

During the year, 71 major operations and 91 minor operations were done. There was one delivery.

ELECTROENCEPHALOGRAPH

This Department remained very active. A total of 278 E.E.G.'s, 98 E.C.G.'s and 23 B.M.R.'s were carried out. In addi-

tion, the technician carried out E.E.G. work at the Provincial Mental Hospital, Ponoka.

SCHOOL OF NURSING

Fourteen students graduated in psychiatric nursing in 1958, completing the three-year course; 8 men and 6 girls. At the present time there are 63 students — 29 girls and 34 men — taking the three-year course. The extent of the work covered and the hours spent is constantly being reviewed and increased where necessary. This course is very valuable and produces many excellent nurses, both male and female.

The affiliation program for student nurses from the various general hospitals has been expanded — 156 affiliated student nurses from the Edmonton General Hospital, Misericordia Hospital, Royal Alexandra Hospital, Edmonton; Holy Cross Hospital, Calgary; Lethbridge Municipal Hospital received eight weeks' instruction in psychiatric nursing in this hospital. The number of students in attendance on each course averaged 26. The calibre of the affiliated students attending was very high and the results from our viewpoint were excellent. Co-operation of all administrations of the various hospitals was excellent. Short orientation courses were given to the few new members of the staff, who are not taking the three-year training course.

The Instructional Staff consisted of four instructors and two clinical supervisors operating under the direction of the Superintendent of Nurses. All of the above staff were well qualified.

BUILDING AND MAINTENANCE

This was kept up very well during the year. Extensive interior decorating was done. Fire practices were held at regular intervals. Instructions were carried out throughout the hospital and also instructions were given to the ward staff.

Farm operations were very successful, and the profits good. The garden crop was excellent and the yield was the highest we have yet had. The quality of the vegetables was very good, and there will be sufficient fruit and vegetables to fill the demand for same to the beginning of the new crop year.

LAUNDRY

This Department continues to be very busy. The work has been done very well. No new equipment was added, but the construction of the new laundry was commenced, and is now well advanced.

TAILOR SHOP

This Department was very busy. The work consists of mostly repairs, and the work done during the year was excellent.

SHOE REPAIRS

This Department remains busy and active.

SEWING ROOM

This Department was very busy. Excellent work was done in the repairing of damaged clothing.

DEPARTMENT OF PUBLIC HEALTH

DIETARY DEPARTMENT

This Department continues to function very well. In addition to a large number of ordinary meals for patients and staff, the average daily population being fed amounting to around 2,000, they also prepared a large number of special diets.

POLICE COURT

This service continues to be very busy. A very large number of cases were sent out on remand through the year, and members of the Medical Staff appeared in court on numerous occasions in connection with this work. Although this service involves a considerable amount of extra work, it is felt this particular service to the community justifies it.

BUSINESS OFFICE

This Department continues to function in its usual efficient manner.

MEDICAL RECORDS

The work in this Department continues to be done very efficiently.

STAFF

The staff situation, both male and female, has remained good. There has been little difficulty keeping this establishment filled. There is a shortage of graduate nurses, but the situation is not bad.

VISITORS

During the year, the hospital was visited by Dr. W. W. Cross, the Hon. Dr. J. D. Ross, the Hon. Mr. Taylor and Dr. MacLean. The Visiting Board also carried out its annual inspection.

PUBLIC RELATIONS

Members of the staff continued to address public organizations whenever possible on the work of the hospital and the problems in the psychiatric field. These contacts were very useful, and the work involved in same was increased as much as possible. Final-year students from the University of Alberta Medical School were given regular clinics during the year, and a member of the Medical Staff gave a full-term lecture course to third-year medical students.

We would like to take this opportunity to express our appreciation for the help given by the Minister, the senior members of the Department of Health, and the Director of the Division of Mental Health, Dr. MacLean.

TABLE 1
MOVEMENT OF POPULATION DURING 1958

	M	F	T	M	F	T
In residence December 31, 1957				1036	507	1543
On leave or otherwise absent				63	40	103
Total on books December 31, 1957				1099	547	1646
ADMISSIONS:						
FIRST ADMISSIONS:						
(a) Voluntary	112	70	182			
(b) Medical Certificates	99	116	215			
(c) Warrant	177	62	239			
(d) Mental Defectives Act	6	3	9			
Total	394	251	645			
READMISSIONS:						
(a) Voluntary	76	74	150			
(b) Medical Certificates	13	33	46			
(c) Warrant	54	28	82			
(d) Mental Defectives Act	1	....	1			
Total	144	135	279			
TRANSFERS IN	4	8	12			
TOTAL ADMISSIONS	542	394	936			
SEPARATIONS:						
DISCHARGES:						
(a) Recovered	165	145	310			
(b) Improved	227	107	334			
(c) Unimproved .....	....	....	....
(d) Unchanged	48	21	69			
Total	440	273	713			
TRANSFERS OUT	88	81	169			
DEATHS	65	27	92			
TOTAL SEPARATIONS	593	381	974			
Total on books December 31, 1958				1048	560	1608
On leave or otherwise absent				75	99	174
Total in residence December 31, 1958				973	461	1434

TABLE 2
PSYCHOSES OF THE PATIENT POPULATION DECEMBER 31, 1958

	Male	Female	Total
300 Schizophrenic Disorders	619	290	909
301 Manic Depressive Reaction	32	40	72
302 Involutional Melancholia	4	20	24
303 Paranoia and Paranoid States	36	15	51
304 Senile Psychosis	15	22	37
305 Presenile Psychosis	1	8	9
306 Psychosis with Cerebral Arteriosclerosis	29	24	53
307 Alcoholic Psychosis	12	2	14
308 Psychosis of Other Demonstrable Etiology	37	14	51
309 Other and Unspecified Psychosis	65	30	95
310 Anxiety Reaction without mention of Somatic Symptoms	2	8	10
311 Hysterical Reaction without mention of Somatic Symptoms	1	....	1
313 Obsessive-Compulsive Reaction	1	2	3
314 Neurotic-Depressive Reaction	7	7	14
318 Psychoneurotic Disorders, Other, Mixed and Unspecified	2	5	7
320 Pathological Personality	13	7	20
321 Immature Personality	1	3	4
322 Alcoholism	9	....	9
324 Primary Childhood Behavior Disorders	6	4	10
325 Mental Deficiency	111	43	154
326 Unspecified Character, Behavior and Intelligence Disorders	3	....	3
020 Juvenile Neurosyphilis	1	....	1
024 Tabes Dorsalis	2	....	2
025 General Paralysis of Insane	26	5	31
026 Other Syphilis of Central Nervous System	3	....	3
083 Late Effects of Acute Infectious Encephalitis	3	1	4
353 Epilepsy	4	8	12
793 Observation without need for further Psychiatric Care.....	3	2	5
Total	1048	560	1608

TABLE 3
PSYCHOSIS BY FIRST ADMISSIONS—1958

	Male	Female	Total
300 Schizophrenic Reaction	102	74	176
301 Manic Depressive Reaction	9	20	29
302 Involuntional Melancholia	9	10	19
303 Paranoia and Paranoid States	11	4	15
304 Senile Psychosis	21	19	40
305 Presenile Psychosis	3	3	6
306 Psychosis with Cerebral Arteriosclerosis	35	23	58
307 Alcoholic Psychosis	4	—	4
308 Psychosis of Other Demonstrable Etiology	13	4	17
309 Other and Unspecified Psychosis	5	5	10
310 Anxiety Reaction without mention of Somatic Symptoms	5	7	12
311 Hysterical Reaction without mention of Somatic Symptoms	2	1	3
313 Obsessive-Compulsive Reaction	—	1	1
314 Neurotic-Depressive Reaction	15	12	27
317 Psychoneurosis with Somatic Symptoms affecting Other Systems	1	—	1
318 Psychoneurotic Disorders, Other, Mixed and Unspecified Types	3	7	10
320 Pathological Personality	60	12	72
321 Immature Personality	12	9	21
322 Chronic Alcoholism	52	5	57
324 Primary Childhood Behavior Disorders	6	12	18
325 Mental Deficiency	10	12	22
024 Tabes Dorsalis	1	—	1
025 General Paralysis of Insane	3	1	4
326 Other and Unspecified Character, Behavior and Intelligence Disorders	2	—	2
353 Epilepsy	4	8	12
688 Puerperal Psychosis	—	1	1
793 Observation without need for further Medical Care	9	1	10
Total	394	251	645

TABLE 4
NATIVITIES OF PATIENTS ADMITTED DURING 1958

COUNTRY	Male	Female	Total
Austria	4	5	9
Canada	405	297	702
China	3	—	3
Czechoslovakia	1	2	3
Denmark	2	—	2
England	29	18	47
Finland	1	—	1
France	2	3	5
Germany	18	10	28
Holland	2	6	8
Hungary	10	4	14
India	—	—	—
Ireland	5	5	10
Italy	7	4	11
Latvia	1	1	2
Lithuania	1	—	1
Malta	—	—	—
Norway	6	2	8
Poland	11	12	23
Romania	—	1	1
Russia	6	1	7
Scotland	11	6	17
Switzerland	2	1	3
Ukraine	13	11	24
U.S.A.	—	3	3
Yugoslavia	2	2	4
Total	542	394	936

TABLE 5
AGES OF PATIENTS ADMITTED DURING 1958

Ages	First Admission			Readmission			Transfers			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Under 15 years	7	9	16	1	—	1	—	—	—	8	9	17
15 to 19 years	18	23	41	2	7	9	—	2	2	20	32	52
20 to 24 years	45	24	69	7	7	14	—	—	—	52	31	83
25 to 29 years	47	22	69	16	16	32	1	—	1	64	38	102
30 to 34 years	44	26	70	20	20	40	—	1	1	64	47	111
35 to 39 years	43	35	78	22	29	51	—	—	—	65	64	129
40 to 44 years	39	20	59	19	25	44	1	1	2	59	46	105
45 to 49 years	31	20	51	13	6	19	—	—	—	44	26	70
50 to 54 years	26	12	38	19	6	25	—	—	—	45	18	63
55 to 59 years	19	8	27	9	6	15	1	—	1	29	14	43
60 to 64 years	13	9	22	8	7	15	—	—	—	21	16	37
65 to 69 years	15	8	23	5	3	8	1	1	2	21	12	33
70 and over	47	35	82	3	3	6	—	3	3	50	41	91
Total	394	251	645	144	135	279	4	8	12	542	394	936

TABLE 6
DISCHARGES CLASSIFIED WITH REFERENCE TO PRINCIPAL PSYCHOSIS AND CONDITIONS FOR 1958

PSYCHOSES	Recovered			Improved			Unchanged or Unimproved			Total		
	M	F	T	M	F	T	M	F	T	M	F	T
Schizophrenic Disorders	77	74	151	36	34	70	...	1	1	113	109	222
300 Manic Depressive Reaction	28	21	49	...	...	...	...	1	1	28	22	50
301 Involutional Melancholia	11	9	20	...	1	1	...	1	1	11	11	22
302 Paranoia and Paranoid States	2	...	2	7	2	9	...	...	...	9	2	11
303 Senile Psychosis	...	...	...	5	1	6	1	1	2	6	2	8
304 Presenile Psychosis	...	...	...	...	1	1	...	...	...	...	1	1
305 Psychosis with Cerebral Arteriosclerosis	1	...	1	3	1	4	...	...	...	4	1	5
306 Alcoholic Psychosis	6	2	8	3	...	3	...	...	...	9	2	11
307 Psychosis of Other Demonstrable Etiology	3	3	6	8	2	10	1	...	1	12	5	17
308 Other and Unspecified Psychosis	2	4	6	4	1	5	2	...	2	8	5	13
309 Anxiety Reaction	5	4	9	4	1	5	...	...	...	9	5	14
310 Hysterical Reaction	2	...	2	1	1	2	...	...	...	3	1	4
311 Obsessive-Compulsive Reaction	1	1	2	...	1	1	...	...	...	1	2	3
312 Neurotic-Depressive Reaction	12	15	27	2	...	2	...	...	...	14	15	29
313 Psychoneurotic with Somatic Symptoms	1	1	1	...	...	...	...	...	...	...	...	...
314 Psychoneurotic Disorders	1	3	4	2	1	3	1	1	2	4	5	9
317 Pathological Personality	2	1	3	61	20	81	15	1	16	78	22	100
318 Immature Personality	2	1	3	10	6	16	2	3	5	13	9	22
320 Alcoholism	9	2	11	64	11	75	10	...	10	83	13	96
321 Other Drug Addiction	...	...	...	...	1	1	1	1	1	1	2	2
322 Primary Childhood Behavior	...	2	2	7	7	14	...	...	...	7	10	17
323 Mental Deficiency	...	...	...	3	3	6	6	11	17	9	14	23
324 General Paralysis of Insane	...	...	...	1	1	2	...	...	...	1	2	3
025 Epilepsy	...	1	1	5	9	14	1	...	1	6	10	16
352 Puerperal Psychosis	...	1	1	...	...	...	...	...	...	...	...	...
688 Observation	1	1	2	1	2	3	8	1	9	10	4	14
793 Total	165	144	309	227	107	334	48	22	70	440	273	713

TABLE 7
DISCHARGES DURING 1958 SHOWING DURATION OF RESIDENCE IN HOSPITAL

PSYCHOSIS	Under 3 mths.			Under 6 mths.			Under 9 mths.			Under 12 mths.			Under 18 mths.			Under 2 years			Over 2 years			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
300 Schizophrenic Disorders	38	38	76	24	28	52	14	11	25	14	9	23	13	7	20	4	5	9	6	11	17	113	109	222
301 Manic Depressive Reaction	38	302		2	5	7	6	2	8	1	2	3	6	1	7				1		1	28	22	50
302 Involitional Melancholia	12	12	24	1	1	4	5	2	2	4	1	1	1								1	11	11	22
303 Paranoia and Paranoid States	4		4	1	1	2	1	2	1	3	2		1	1	1	1	1	1			6	2	11	15
304 Senile Psychosis	2		3	2		2						1	1	1	1						6	2	11	15
305 Presenile Psychosis																								
306 Psychosis with Cerebral Arteriosclerosis	2	1	3	1		1													1		1	4	1	5
307 Alcoholic Psychosis	8	2	10	1		1			1	2											1	9	2	17
308 Psychosis of Other Etiology	7	3	10	1		1	2						1	1	1	1	1	2			1	12	5	17
309 Other and Unspecified Etiology	4	2	6			2	1	3	1				2	2							1	8	5	13
310 Anxiety Reaction without Somatic Symptoms	5	2	7	3		3	6	1													9	5	14	23
311 Hysterical Reaction	3		3			1															3	1	2	3
312 Obsessive-Compulsive Reaction	1		1	1		2	1	2													3	1	2	3
313 Psychoneurotic with Somatic Symptoms	13	9	22	3		3	1	3	4												14	15	29	41
314 Psychoneurotic with Somatic Symptoms	1		1	1		1															1	4	5	10
315 Psychoneurotic Disorders	69	16	85	4	4	18	3	1	4	1	1	2							1		1	78	22	100
316 Pathological Personality	13	8	21	1	1	4	5	1	6	1	1	1	1	1	2						83	13	96	
317 Immature Personality	73	10	83	3	1	4	5	1	6	1											1	1	1	2
322 Alcoholism																								
323 Other Drug Addiction	1	1	2			1	1	1	2	2	1	1	1	1	2							7	10	17
324 Primary Childhood Behavior	5	5	8	13	1	1	1	1	2	2	1	1	1	1	2	1	1	2	2	1	3	9	14	23
325 Mental Deficiency																					1	6	1	10
025 General Paralysis of Insane																					1	1	1	1
353 Epilepsy	3	8	11	1		1							1	1	2	1	1	1			10	4	1	14
688 Puerperal Psychosis																					1	1	1	1
Observation	1	2	10						2	2			2								10	4	1	1
317 Psychoneurosis	8		1																		1	1	1	1
Total	290	141	431	44	55	99	40	27	67	19	15	34	28	12	40	8	7	15	12	16	28	441	273	714

TABLE 8

DEATHS DURING 1958 BY ABRIDGED INTERNATIONAL STATISTICS CLASS

	Male	Female	Total
1 Tuberculosis of Respiratory System	1	1	2
3 Syphilis and Sequelae .....	.....	1	1
18 Malignant Neoplasms	2	1	3
22 Vascular Lesions affecting Central Nervous System	32	8	40
26 Arteriosclerotic and Degenerative Heart Disease	20	5	25
28 Hypertension with Heart Disease .....	.....	2	2
31 Pneumonia	2	1	3
33 Ulcer of Stomach and Duodenum	1	.....	1
35 Intestinal Obstruction and Hernia	1	.....	1
38 Nephritis and Nephrosis	2	3	5
46 All Other Diseases	3	4	7
49 Suicide and Self-inflicted Injury	1	1	2
Total	65	27	92

TABLE 9

DEATHS DURING 1958 BY PSYCHOSES

	Male	Female	Total
300 Schizophrenic Disorders	9	4	13
301 Manic Depressive Disorders	1	1	2
302 Involutional Melancholia	1	1	2
303 Paranoia and Paranoid States	1	1	2
304 Senile Psychosis	14	3	17
305 Presenile Psychosis .....	.....	2	2
306 Psychosis with Cerebral Arteriosclerosis	21	11	32
308 Psychosis of Other Demonstrable Etiology	1	1	2
309 Other and Unspecified Psychosis	4	.....	4
314 Neurotic Depressive Disorders	1	.....	1
318 Psychoneurotic Disorders, Other, Mixed and Unspecified Types .....	.....	1	1
320 Pathological Personality	1	.....	1
322 Alcoholism	2	.....	2
325 Mental Deficiency	4	1	5
025 General Paralysis of Insane	3	.....	3
026 Other Syphilis of Nervous System .....	.....	1	1
083 Late Effects of Acute Infectious Encephalitis	1	.....	1
793 Observation	1	.....	1
Total	65	27	92

CHRONIC HOSPITALS

PROVINCIAL AUXILIARY MENTAL HOSPITAL, CLARESHOLM

PROVINCIAL AUXILIARY MENTAL HOSPITAL, RAYMOND

ROSEHAVEN, CAMROSE

The Provincial Auxiliary Mental Hospital, Claresholm, continued to care for 100 women patients, 31 of whom were Mental Defectives. The average age of the patients — excepting the Mental Defectives — was over 62. Nine patients were received by transfer from the Provincial Mental Hospital, Ponoka. One Mental Defective was admitted from the community.

The Provincial Auxiliary Mental Hospital, Raymond, had a constant population of 133 women patients. The average age of the patients — excepting the Mental Defectives — was over 65. During the year, 20 Mental Defectives were transferred to Deerhome, Red Deer. Some 28 patients were received by transfer from the Provincial Mental Hospital, Ponoka, and five were admitted directly from the community.

Rosehaven, Camrose, had a daily patient population of approximately 510 men and women. The average age was over 80. Admission by transfer from the Provincial Mental Hospital, Ponoka, and the Provincial Mental Institute, Edmonton, amounted to 89 (males 52 and females 37).

There were 84 deaths (males 51, females 33) during the year. There were five discharges.

Separate reports on each institution follow.

PROVINCIAL AUXILIARY MENTAL HOSPITAL, CLARESHOLM

R. R. MACLEAN, M.D.

MOVEMENT OF PATIENTS

In residence January 1, 1958, there were 96 patients, and in residence December 31, 1958, there were 98 patients.

One patient was admitted under the Mental Defectives Act.

Nine patients were transferred from the Provincial Mental Hospital, Ponoka, to this hospital.

Five patients were transferred to the Provincial Mental Hospital, Ponoka, for further medical or psychiatric care.

One patient was transferred to Deerhome, Red Deer.

One patient was discharged.

There were no deaths during the year.

ACCIDENTS AND ELOPEMENTS

There were no elopements during the year and no accidents of a serious nature.

GENERAL HEALTH

The doctor from the Lethbridge Guidance Clinic examined all the patients in July and found that the general health of the patients was good. A local physician has made regular visits and has been most helpful at all times. The necessary X-Ray and laboratory tests were done at the Claresholm Municipal Hospital.

OCCUPATIONAL DEPARTMENT

The occupational department maintained its high standard of work. The work was sold throughout the year.

The more deteriorated patients were kept occupied in the day-room during the winter months. They do some needlework, knitting, simple jig-saw puzzles, and make scrapbooks.

Between 20 and 25 patients work in the garden and grounds during the summer months under the supervision of a ward aide.

RECREATIONAL ACTIVITIES

Bingo parties, the usual Christmas parties, and sports day were held. The occasional ball game and garden party were also enjoyed.

A picnic was held at one of the picnic spots a few miles from town. The patients were taken out by the staff in their cars and this was greatly enjoyed.

The Callow Coach from Lethbridge took the patients on several drives and they were served lunch by various church and service groups after the drive.

The staff drove the patients around town to see the Christmas lights and served lunch to them in the Nurses' Home.

The United Church Choir and the Salvation Army visited the hospital. These visits were much appreciated by the patients.

Gifts were received at Christmas from several groups. The Ladies' Auxiliary to the Canadian Legion supplied comforts for some of the patients throughout the year.

Films were shown almost every week during the winter months and most of the patients attended these shows.

Many of the patients enjoy television every day. A television set was given to the hospital by relatives of one of the patients.

During the winter the patients went for daily walks when weather permitted. During the summer months all the patients went out on the lawns and around the grounds without supervision.

BEAUTY PARLOUR

Most of the patients get their hair done and the staff gave a lot of permanents.

RELIGIOUS SERVICES

Local clergymen conducted services each Sunday afternoon. Roman Catholic services were conducted once a month.

DENTISTRY

The Dentist, from the Provincial Mental Hospital, Ponoka, visited the hospital in June and gave the necessary dental care. Emergency dental work was done by the local dentist.

FIRE PROTECTION

The buildings have been inspected by the fire inspector. Fire practices were held and equipment checked regularly.

BUILDINGS

The maintenance staff has done the necessary repairs to the buildings and equipment.

GARDENS AND GROUNDS

The vegetable crop was good.

VISITORS

The Visiting Board visited the hospital in October.

Dr. R. R. MacLean, Director, Division of Mental Health, visited the hospital several times, and his help and advice were greatly appreciated.

Relatives and friends visited the patients during the year.

TABLE 1
MOVEMENT OF PATIENT POPULATION DURING 1958

	M	F	T	M	F	T
In residence January 1, 1958	96	96
On leave or otherwise absent	1	1
ADMISSIONS:						
FIRST ADMISSIONS:						
(a) Voluntary
(b) Certificate
(c) Warrant
(d) M.D. Act	1	1	....	1	1
RE-ADMISSIONS:						
(a) Voluntary
(b) Certificate
(c) Warrant
(d) M.D. Act
Transfers	9	9	....	9	9
Total Admissions	10	10	....	107	107
SEPARATIONS:						
DISCHARGES:						
(a) As Recovered
(b) As Improved
(c) As Unimproved	1	1	....	1	1
Total Discharges	1	1	....	....	....
Transfers	6	6	....	6	6
Deaths
				7	7
On leave or otherwise absent	100	100
				2	2
In residence December 31, 1958	98	98

TABLE 2
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

	Male	Female	Total
03 Psychoses with Epidemic Encephalitis	2	2
08 Psychoses with Cerebral Arteriosclerosis	1	1
11 (a) Pre-senile Psychoses	1	1
16 Psychoneuroses	1	1
17 Manic Depressive Psychoses	1	1
18 Dementia Praecox (Schizophrenia)	54	54
19 Paranoia and Paranoid Conditions	8	8
21 Psychoses with Mental Deficiency	8	8
23 Without Psychoses	22	22
12 Involuntal Psychoses (Depression)	1	1
05 Alcoholic Psychoses	1	1
Total	100	100

PROVINCIAL AUXILIARY MENTAL HOSPITAL,
RAYMOND

R. R. MACLEAN, M.D.

MOVEMENT OF PATIENTS

On January 1, 1958, there were 133 patients in residence. During the year, there were five first admissions and 28 patients received as transfers from other Provincial Mental Hospitals. Separations numbered 34, consisting of three discharges, 24 transfers to other Provincial Mental Hospitals, and seven deaths, leaving a total of 132 patients in residence on December 31, 1958.

ACCIDENTS AND ELOPEMENTS

There were no elopements. Four accidents resulted in fractures. Appropriate treatment was carried out in each case. The general health of the patients throughout the year was good.

GENERAL HEALTH

Chest X-Rays were done by the Mobile Unit on all patients. Two patients showed suspicious lung shadows and were transferred to the Provincial Mental Institute, Edmonton. The dentist came for his annual seven to ten day visit, and all patients' teeth were cared for, two receiving new dentures. Emergency dental care was handled by the two local dentists. Three patients with means were taken to Lethbridge to have eyeglasses fitted to their own prescriptions. A clinic of four Medical Doctors in the Town of Raymond was on call, as well as a Psychiatrist from Lethbridge.

OCCUPATIONAL THERAPY

Patients were occupied in the Laundry, Sewing Room, Kitchen, Nurses' Home, and in the wards and dormitories. A few patients helped to pick vegetables in the garden, and one patient had the responsibility of gathering the eggs. There was full-time attendance by other patients in the Occupational Parlor, where all kinds of needlework, knitting, rag rug-making and darning was done. Tea was served each afternoon and a radio provided entertainment.

LIBRARY

The patients' library is situated in the Occupational Parlor, which some use as a reading room. One new book was added each month. Current issues of many popular magazines were provided through subscriptions or donations from local friends and clubs.

RELIGIOUS SERVICES

Both Catholic and United Church services were held at the hospital once monthly. These clergymen also presided at patients' funerals when required to do so.

RECREATION AND ENTERTAINMENT

During the winter months, picture shows were shown on the ward once weekly; in the summer, bi-monthly. The Callow Coach made weekly calls last summer, taking 20 patients at a time for afternoon rides to neighboring towns and beauty spots. These were thoroughly enjoyed. Several clubs, Imperial Order of the Daughters of the Empire Chapters, United Farm Women of Alberta Groups, have donated jewelry, records for the record player, home-made candy and treats. There was a radio and piano on the ward, and also in the Annex sitting-room. Special holidays were celebrated with a dance, concert or party. The television remained the most enjoyed by all patients. In the summer, a Sports Day was held and occasionally picnic suppers were served on the lawns.

STAFF CHANGES

There were no staff changes during the year.

VISITORS

Periodic visits of inspection were made by the Department of Public Health, Department of Public Works, Fire Department and Fire Inspector, and Electrical and Boiler Inspectors. The Minister, Deputy Minister and Assistant Deputy Minister of Health visited and inspected. The Provincial Visiting Board made its annual visit.

GARDENS AND GROUNDS

Some new trees and shrubbery were added to the hospital grounds and new flower beds were laid out. The outside appearance of the building was greatly improved by repairs and painting so that the hospital grounds were very attractive and looked well tended. The vegetable garden provided summer vegetables throughout the reason, but the fall harvest was not so abundant as usual due to adverse growing weather.

CONCLUSION

The hospital capacity was maintained throughout the year and the general health of the patients was satisfactory.

TABLE 1
MOVEMENT OF PATIENT POPULATION DURING 1958

	M	F	T	M	F	T
In Residence January 1, 1958	133	133
ADMISSIONS:						
(a) Voluntary (M.D. Act)	1	1			
(b) Certificates	4	4			
(c) Warrant					
(d) Order					
(e) Transfer	28	28	....	33	33
				166	166
RE-ADMISSIONS		
SEPARATIONS:						
(a) As recovered	2	2			
(b) As improved	1	1			
(c) As unimproved	24	24			
(d) Transferred to other hospitals					
(e) Eloped					
(f) Deported					
(g) As with Psychosis	7	7	....	34	34
(h) Deaths	132	132
In Residence December 31, 1958	132	132

DEPARTMENT OF PUBLIC HEALTH

TABLE 2
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

	Male	Female	Total
300 Schizophrenic Disorders	79	79
301 Manic-Depressive Reactions	7	7
303 Paranoia and Paranoid States	10	10
304 Senile Psychosis	4	4
306 Psychosis with Cerebral Arteriosclerosis	1	1
308 Psychosis with other Demonstrable Etiology	4	4
309 Other and Unspecified Psychosis	3	3
325 Mental Deficiency	23	23
025 General Paresis of Insane	1	1
Total	132	132

TABLE 3
CAUSES OF DEATH DURING 1958
ABRIDGED INTERNATIONAL CLASSIFICATION

CLASSIFICATION	Male	Female	Total
27 Disease of Heart	1	1
31 Pneumonia	2	2
33 Ulcer of Stomach and Duodenum	1	1
46 All Other Diseases	3	3
Total	7	7

TABLE 4
DEATHS BY ORIGINAL PSYCHOSIS

Senile Psychosis—Deterioration	2	2
Manic Depressive Psychosis—Circular	1	1
Schizophrenia—Catatonic	1	1
Schizophrenia—Paranoid	1	1
Schizophrenia—Hebephrenic	1	1
Mental Deficiency—Mid-Grade Imbecile	1	1
Total	7	7

ROSEHAVEN, CAMROSE

R. R. MACLEAN, M.D.

MOVEMENT OF RESIDENTS

On January 1, 1958, the resident population at Rosehaven numbered 501, of which 284 were men and 217 were women. The total number in residence on December 31, 1958 was 495; 281 men and 214 women.

There were 138 residents admitted to Rosehaven during 1958. Of this number, 43 were received from the Provincial Mental Hospital, Ponoka, 46 from the Provincial Mental Institute, Edmonton and 49 returned from leave of absence.

Separations from Rosehaven during 1958 numbered 144, 84 of these attributable to death, five were discharged, three were transferred to the Provincial Mental Institute, Edmonton and 52 went on leave of absence.

Admissions throughout the year were in the form of transfers from mental hospitals in Alberta and filled beds made available by death or discharge. The average daily population was 505.4.

Deaths were due to degenerative causes.

ACCIDENTS AND ELOPEMENTS

During the year a number of residents received injuries either from accidental falls or as a result of interference from other residents. Some of these resulted in contusions or lacerations of a minor nature and required only first aid treatment. In other instances, more extensive treatment was necessary and some involved hospitalization or suturing of lacerations. There were 74 such accidents; 31 fractures, six lacerations requiring suturing and 37 requiring X-ray investigation or special care. Nine residents left the grounds without permission and in three cases police assistance was sought. All were returned.

GENERAL HEALTH

The general health of the residents was considered good in view of the age of these individuals. A progressive mental and physical decline in most cases made an increasing amount of nursing necessary.

An average of 24.5 patients required infirmary care each day. During the year, 33 residents required care at St. Mary's Hospital for surgical, orthopedic or diagnostic attention. Out-patients' work done at St. Mary's for Rosehaven consisted of laboratory work; 80 blood counts, 29 urinalysis and 14 miscellaneous tests as well as 51 X-ray pictures and one electrocardiogram. Eight patients were referred to the Tuberculosis Clinic for X-rays and examination.

Medical care was supplied by the Smith Clinic in Camrose.

Dental examinations and necessary dental care were given twice a year by the dentist from the Provincial Mental Institute, Edmonton. Emergency work was done by a local dentist.

OCCUPATIONAL THERAPY

Organized occupational therapy classes have been operating throughout the year. Groups from each ward have attended in rotation, averaging 50 residents at classes twice a week. A successful bazaar was held in November and articles made by the residents sold readily. An increasing interest was shown by the residents in this work. An average of 18 residents worked on institutional services; laundry, kitchen and garden. The average number employed on wards in light housekeeping tasks was 72.

RELIGIOUS SERVICES

Weekly Protestant Church services were held at Rosehaven and were arranged by the local Ministerial Association. These were well attended with an average of 114 residents present. Roman Catholic services were held several times during the year.

RECREATION

Walking parties and lawn groups were taken out each day, weather permitting. An average of 200 residents were out during the day in the summer. 140 residents were given ground privileges and were out almost daily. A movie film was shown once every two weeks from September to May with an average of 148 residents in attendance. Parties in the form of bingo, tea dances and cards were arranged each month and several picnic suppers were held during the summer. Cards, games, television and radios were made available on the wards. One local organization sponsored car rides for residents twice during the year and organized a Christmas concert. Ex-servicemen were visited regularly by members of the Ladies' Auxiliary to the Canadian Legion who arranged outings each month. Various church organizations visited their members regularly.

BUILDINGS

The buildings have been well maintained and repairs done promptly.

A greenhouse was constructed and has been in use the past six months.

A carpenter shop and paint shop were completed early in the year.

GARDEN AND GROUNDS

The garden and grounds have been well maintained during the year.

STAFF

The general health of the staff has been good. Vacancies arising from staff resignations have readily been filled. T.A.B. vaccine has been given to all staff members.

VISITORS

The Minister of Public Health visited during the year.

Regular visits have been made by the Director of Mental Health.

The annual visit was made by the Visiting Board.

TABLE 1
MOVEMENT OF POPULATION DURING 1958

	M	F	T	M	F	T
In residence December 31, 1957				284	217	501
ADMISSIONS:						
From P.M.H., Ponoka	29	14	43			
From P.M.I., Edmonton	23	23	46			
Returned from L.O.A.	14	35	49			
	66	72	138	66	72	138
				350	289	639
SEPARATIONS:						
Deaths	51	33	84			
Discharge (to P.M.I.) .....	...	3	3			
Discharge following L.O.A.	3	2	5			
On L.O.A.	15	37	52			
	69	75	144	69	75	144
In residence December 31, 1958				281	214	495

TABLE 2
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

300	Schizophrenic Disorders	109
301	Manic Depressive Reaction	15
303	Paranoia and Paranoid States	37
304	Senile Psychoses	163
306	Psychoses with Cerebral Arteriosclerosis	111
308	Psychoses of Demonstrable Etiology	8
309	Other and Unspecified Psychoses	11
314	Neurotic Depressive Reaction	1
320	Pathological Personality	1
321	Immature Personality	2
322	Alcoholism (Exc. 307)	2
323	Other Drug Addiction (Exc. 308.6)	1
325	Mental Deficiency (Exc. 309.1)	6
024	Tabes Dorsalis	2
025	General Paralysis of Insane	6
026.1	Psychoses with other Syphilis of C.N.S.	3
930	Not Psychotic	17
	Total	495

TABLE 3
CAUSES OF DEATH DURING 1958
ABRIDGED INTERNATIONAL CLASSIFICATION

DISEASE	Male	Female	Total
17 All other diseases classified as Infective and Parasitic	1	1	2
18 Neoplasms, Malignant	1	2	3
22 Vascular Disease of Central Nervous System	3	7	10
26 Arteriosclerotic and Degenerative Heart Disease	15	4	19
27 Other Diseases of Heart	2	2	4
31 Pneumonia	27	15	42
35 Intestinal Obstruction	1	...	1
38 Nephritis-Nephrosis	1	1	2
46 All other Diseases .....	...	1	1
TOTALS	51	33	84

TABLE 4
CLASSIFICATION OF DEATHS ACCORDING TO ORIGINAL PSYCHIATRIC
DIAGNOSIS, 1958

DISEASE	Male	Female	Total
SCHIZOPHRENIC DISORDERS:			
Catatonic .....	...	2	2
Paranoid	4	1	5
Manic Depressive Reaction	2	...	2
Paranoid and Paranoid States	3	...	3
Senile Psychosis	23	23	46
Psychosis with Arteriosclerosis	13	6	19
Not Psychotic	1	...	1
Mental Deficiency	1	...	1
Undiagnosed	2	1	3
Tabes Dorsalis	1	...	1
Alcoholic Psychoses (Koraskow Syndrome)	1	...	1
TOTALS	51	33	84

INSTITUTIONS FOR MENTAL DEFECTIVES

THE PROVINCIAL TRAINING SCHOOL, RED DEER

DEERHOME, RED DEER

The Provincial Training School's patient population increased from 707 to 758 during the year. This was made possible by the opening of the new infirmary ward. Of these, at the year end, 412 (54%) were 15 years of age or over. During the year 184 patients—(males 82, females 102) were admitted. There were 59—(males 30, females 29)—discharges. Transfers to Deerhome of adult patients, chiefly, numbered 64—(males 43, females 21). There were 12 deaths.

The training program was carried on with special emphasis on the possibility of the discharge of a goodly number of the trainees.

Deerhome was opened for patients on January 8th. On the latter date ten female defectives were admitted by transfer from the Provincial Training School, and 22 female defectives were admitted from the Provincial Mental Hospital, Ponoka. By the end of the year the total patient population was 335—(males 175, females 160). Since only 16 of the patients were admitted directly from the community, some 300 beds were vacated in the Mental Hospitals and the Training School, and made available for new and more suitable cases for treatment and training.

During the year five patients—(males one, females four)—were formally discharged. The discharges were contrary to the expectation that the patient population would be very static. There were 72 patients — (males 39, females 33) — granted Leaves-of-Absence during the year. There were two (male one, female one) deaths.

Construction of two new units, one of which will be the infirmary, was commenced. The occupancy of these new wards will release more beds in the Training School and the Mental Hospitals.

Separate reports from the above institutions follow.

PROVINCIAL TRAINING SCHOOL, RED DEER

L. J. LE VANN, L.R.C.P. Edin., L.R.C.S. Edin., L.R.F.P.S. Glas.,
Medical Superintendent

IN RESIDENCE, ADMISSIONS, DISCHARGES, DEATHS

There were a total of 268,407 patient days spent at this School, compared with 255,853, in 1957, an increase of 4.9 per cent over last year.

146 new admissions were effected during the year, 68 males and 78 females. There were 38 readmissions from previous years, making a total of 186 admissions, which include one patient transferred from the Provincial Mental Institute and one patient from Deerhome for Eugenics Surgery.

59 patients were discharged from the Institution as placements in the community or returned to their homes. Of these, 30 were male and 29 females.

There were 12 deaths during the year, of which the larger portion were associated with arteriosclerotic and degenerative heart disease and four with respiratory catastrophes.

APPLICATIONS FOR ADMISSION

166 new applications for admission were received at this School with a higher trend toward the mid and lower-grade type of patient. 26 applicants of this year's applications were admitted, the other admissions coming from the admission backlog of previous years.

EUGENICS BOARD VISITS, STERILIZATIONS, ETC.

The Eugenics Board visited on four occasions and the Visiting Board made a complete round of the Hospital on September 12th, 1958. 34 cases from the School were presented to the Board and passed clear for sterilization. Deerhome presented eight cases through the School and one out-patient was presented, via the Calgary Clinic. 16 patients were sterilized, ten males and six females. The last five sterilizations, including one male from Deerhome, were carried out at the Training School, which now has complete surgical facilities and a Consultant and Eugenics Surgeon.

STAFF CHANGES AND ACTIVITIES

There has been little change in the staff situation. Most of the positions have been able to be filled.

HEALTH OF TRAINEES AND STAFF

There have been no untoward health problems at the School during the year. Immunization procedures against polio have been completely carried out, including all the staff, as well as patients. Routine immunization against Diphtheria, Whooping Cough, Enteric Fevers have also been carried out on all patients and

Enteric Fever inoculations on all staff. The School has remained free from tuberculosis infection and as an additional prophylactic procedure, it has now been possible to X-ray all new admissions to exclude pulmonary tuberculosis and rectal swabs are taken regularly of all new admissions to exclude the possibility of Enteric Fever Carriers.

TRAINING PROGRAM FOR NURSES AND ATTENDANTS

The three year training program has been carried out and is gaining considerable stature in other Provinces. In Manitoba, Saskatchewan and British Columbia, graduates from the School are being given the status of Psychiatric Nursing graduates and in Ontario at the Thistletown Unit for Emotionally Disturbed Children, they have accepted graduates from this School as having all the necessary training required and are giving them a four months' orientation course to be regarded as graduates of Thistletown. The training course at Thistletown is a two year intensive program of training.

The program of the rotation of Second Charges on the wards, which was started last year, has proven to be a successful manoeuvre and has shown itself in general, in greater efficiency during the absence, either for holiday or time off, of the Charge Nurse.

TRAINING PROGRAM FOR TRAINEES

The training program for trainees has become moderately stabilized. This year several meetings were held with the School Teachers to officially formulate the academic curriculum and to discuss the modifications of previous years. The work on Primers in Reading and Elementary Arithmetic texts is still receiving attention and it is hoped will be completed sometime during the coming year.

Children still continue attending areas in the City of Red Deer in order to receive training in normal activities, such as shopping, purchasing of their own clothes and have also attended farm exhibits at the Red Deer Municipal Fair.

Sense Training

70 children are at present enrolled in Sense Training Classes. This includes three psychotic children. Ten of last year's class were able to be promoted from the pre-kindergarten level to a grade one school level.

Recreational Activities

A total of 72,304 attendances were recorded at the various recreational facilities provided by the School. This included school concerts, cinema performances, Hallowe'en, and Christmas parties.

Recreational classes are now held ten hours per day and there are approximately 200 children attending recreational classes every day.

302 trainees spent at least a week at the Randall R. MacLean Cottages at Gull Lake and with the installation of electricity to both Cottages this year, it was possible to make available at the Cottages, refrigeration, radio and television.

In addition to these facilities, group games, such as hockey, broomball, ice skating and baseball were also carried out and provided useful and enjoyable activities for the trainees.

Occupational Therapy

A total of 159 children attended Occupational Therapy Classes during the year and became quite proficient in weaving, soft toy making, as well as regular sewing, embroidering and basketry.

Two Gilmore Looms with stools, were purchased and considerable progress was made in the variety and type of hand woven articles.

40 trainees attended daily Carpentry Classes during the year and produced many pieces of hard-wood furniture, as well as garden furniture. During the year, as a special training project, the trainees completed two 16 foot Cabin Cruisers with the materials being supplied through the Parent School Organization for Retarded Children of this School.

In this year's Fair, the trainees of the School entered 22 handicraft items in the adult handicraft section. Of the 22 items entered, 16 first, second and third prizes were won by these items. These included pieces of woodwork, hand woven materials, quilts, fancywork and wood turning.

Farm Instruction

Farm instruction has continued as during previous years and the boys received a good basic training in animal husbandry, crop sowing, harvesting and market garden procedures. During the winter months many of them were assigned and worked in the Greenhouse and Root Cellars to receive special training in the winter care of plants and harvested materials.

It has been found that placements for boys who have received training of this sort is proving very successful and the vast majority of placements amongst farms are almost invariably successful.

Shoemaking

This occupation at the School is useful in providing work therapy for some of the trainees who have various defects, other than mental deficiency who must remain in the School for nursing care. It has also proven most useful in accelerating the repair of trainees, shoes and thereby minimizing the need for greater shoe stocks.

EXTRA MURAL ACTIVITIES

The Parent School Organization provided the money for the electrification of the Randall R. MacLean Cottages this year. They

also provided monies for the purchase of a Microtome, Incubator and other minor Laboratory equipment.

Parents arranged to take 110 children home for Easter holidays, 212 children home for summer holidays and 193 children home for the Christmas holidays. In each one of these holiday periods, this year, there was a dramatic increase in the number of children going home, compared with previous years. It is becoming evident that parent education in relation to the trainees at the School, through the Parent School Organization, is creating wider acceptance of the retarded child.

The yearly conference of The Alberta Teachers' Association for Retarded Children meeting at the Provincial Training School for a three day period again took place this year. At these Conferences, teachers throughout the Province are gaining additional insight of modern and proper methods of looking after and teaching mentally retarded children. In this way, although only a beginning, progress is being made towards the standardization of education and care of mentally retarded children throughout the Province.

SPECIAL TALKS AND PUBLIC RELATIONS

Senior staff of the School gave talks to interested groups, consisting of Home and School Associations, Farm Women's Groups and Service Clubs. Two staff members participated in two television programs and the teaching staff spoke on six occasions to outside groups.

Provincial Guidance Clinics were carried out for Central Alberta and Rocky Mountain House Districts.

NEW CONSTRUCTION

During the past year new construction commenced on a new Vocational Training building, on an addition to the Power House and a new Root Cellar. Of these, the Root Cellar was completed, the shell of the Power House was completed, with work still going on towards the construction of a new Boiler, and the Vocational Training building will be ready for occupancy by the end of January, 1959.

STORES

Stores and clothing supplies have been maintained at a useful and economic level. Approximately 45% of the clothing requirements of the School are now supplied by parents, friends and various other agencies. This maintains a good variety and appearance of clothing and does much to minimize the sameness of patients' clothing, so often prevalent in institutions.

KITCHEN AND DINING ROOM

There have been alternations made in the Kitchen, which included new sinks, mixers and new refrigeration units.

Meals have been maintained at a good level with the general standard of cuisine and variety being above average.

LAUNDRY AND LINEN REPAIR ROOM

It has been found necessary to send approximately 4,000 pounds of laundry each week to the Deerhome Institution, due to some limitations of facilities at the Training School Laundry. Notwithstanding, some 32,000 pounds of laundry are processed each week, in the School Laundry. Efforts have been made to further increase the efficiency of the laundry by the additional purchase of Presses and Dryers.

An anticipated changeover to a larger calibre of the steam lines will cut down drying time of machines from approximately one hour per load to 30 to 35 minutes.

FARM

The overall picture of the crop was above average, despite dry spring weather.

Due to a carryover of Cereal Grains from last year's bumper crop, only oats and green-feed were seeded this year. The average oats per acre yield was 60 bushels and approximately 35 tons of green-feed were harvested.

The dairy section produced 302,000 pounds of milk this year. As a matter of interest, the dairy herd has produced 16% above the national average for milk production and 19% above the national average for butterfat content.

For the first time in two years heifer calf productions exceeded bull calf, for the last six months of this year. This will enable the dairy herd to have replacements for some of the cows which are approaching a less efficient milk-production level.

A gas-fired cooker installed last winter has greatly improved the handling of swill and the installation of natural gas heaters in the various farm buildings has minimized fire hazard and provides heating of a more controllable and less laborious type.

Egg production of a new type of De Kalb chicken pullets are being used this year for the first time and the chickens at the present time and for the past two months, have shown an egg production of 80%.

GARDEN

The potato crop suffered this year as a result of a killing frost on June 12th; notwithstanding, approximately 114 tons of potatoes were harvested.

Turnips and beets had to be reseeded due to cutworm damage in the spring and as a result only ten tons of turnips and two tons of beets were harvested.

Plastic pipe was installed towards the end of the summer for irrigation of the vegetable crop and it is felt that this should have a beneficial effect on subsequent garden harvests.

45,000 flowering plants and 15,000 cabbage plants were grown in the Greenhouse during the year and were used for

landscaping and early planting of cabbage plants. As a result of this Greenhouse facility, it was possible to harvest 44 tons of cabbage.

GROUNDS

The yearly improvement in landscaping has continued with some 45,000 plants being set out in the early spring. All new construction areas were prepared for grass and flower beds for this coming spring, a good deal of the landscaping being carried out by staff and trainees.

Replacement of a sewer line caused a considerable amount of damage at the front of the school area. This was quickly reseeded with grass and flowering plants and in a matter of three weeks regained its normal well kept appearance.

Approximately 300 additional shrubs and trees were planted during the spring by the Lacombe Nurseries.

A new road was completed to service the Maintenance and Mechanical Branch Shops. This road also leads directly to the truck entrance for the institution.

The lawn sprinkling system in front of the School has now reached 350 feet of plastic pipe and 140 sprinkler heads, which enables the front part of the School to appear green and well kept and is the cause for many of the favorable comments by the general public, on the well kept appearance of the Training School.

WARDS

General maintenance has been carried out on all the Wards as required. This includes minor repairs, painting, replacements of windows and the necessary plumbing requirements.

FIRE SERVICE

The fire brigade consisting of 23 men is available on a twenty-four hour duty system.

Fire fighting equipment, consisting of the large 500 gallon capacity fire truck, is further supplemented by many CO₂ and Acid Extinguishers. All wards, work shops and staff quarters are supplied with both CO₂ and Soda Acid Fire Extinguishers. These are examined at least once a year. The CO₂ Extinguishers are weighed every six months and recharged whenever necessary.

During the year, fire inspections have been carried out by the Fire Commission Staff and also the City Fire Department.

SERVICE DEPARTMENTS

These have been maintained as during previous years. The Service Departments have now all been centralized under the direction of the Maintenance Foreman.

APPRECIATION

It is only fitting, at this time, for the Medical Superintendent to express his appreciation to all the members of his staff, who

work under his supervision, for their conscientiousness and high level of effort they have put out during the year on behalf of the children and the School itself.

It is also an opportunity to express the appreciation of the Superintendent to the Minister of Health, Dr. J. Donovan Ross, for his sympathetic and understanding attitude of the School's needs and to Dr. Randall R. MacLean, Director, Division of Mental Health, who has this year and every year in the past, never spared himself in making known the needs of the School and being a source of reference for any problem which has arisen, which might not have been solved, but for his vast fund of knowledge and experience.

TABLE 1
MOVEMENT OF FEEBLEMINDED POPULATION

	M	F	T	M	F	T
Defectives on books of Institution as at 1st January, 1958				395	312	707
ADMISSIONS:						
1. First admissions—voluntary	68	78	146			
2. Re-admissions	14	24	38			
3. Transfers—						
1 from P.M.I.						
1 from Deerhome						
for Surgery	2	.....	2			
Total number of admissions	84	102	186	84	102	186
TOTAL NUMBER OF DEFECTIVES ON THE BOOKS DURING 1958				479	414	893
SEPARATIONS:						
1. Discharges	30	29	59			
2. Transfers—						
21 F. to Deerhome						
42 M. to Deerhome	43	21	64			
1 M. to P.M.H.	4	8	12			
3. Deaths						
Total number of separations	77	58	135	77	58	135
DEFECTIVES ON BOOKS OF THE INSTITUTION AT 31st DECEMBER, 1958....				402	356	758

TABLE 2
AGE OF RESIDENT POPULATION CLASSIFIED WITH REFERENCE TO MENTAL STATUS

AGE GROUP	IDIOT			IMBECILE			MORON			BORDERLINE			TOTALS		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 - 4	8	11	19	35	37	72	10	13	23	1	1	2	54	54	108
5 - 9	15	22	37	64	39	103	52	41	93	4	1	5	135	103	238
10 - 14	19	21	40	52	35	87	36	31	67	1	1	2	108	88	196
15 - 19	18	14	32	26	18	44	7	6	13	1	1	1	51	39	90
20 - 24	12	3	15	6	14	20	1	2	3	1	1	1	19	23	42
25 - 29	16	5	21	5	9	14	1	1	2	1	1	1	12	16	28
30 - 34	3	3	6	8	6	14	1	1	2	1	1	1	11	12	23
35 - 39	3	3	6	8	6	14	1	1	2	1	1	1	6	9	15
40 - 44	2	2	4	4	5	9	1	1	2	1	1	1	4	6	10
45 - 49	1	2	3	2	2	4	1	1	2	1	1	1	1	1	3
50 - 54	1	1	2	1	5	6	1	1	2	1	1	1	1	1	3
55 - 59	1	1	2	1	1	2	1	1	2	1	1	1	1	1	3
60 - 64	1	1	2	1	1	2	1	1	2	1	1	1	1	1	3
TOTALS	84	88	172	204	171	375	107	93	200	7	4	11	402	356	758

TABLE 3
MENTAL STATUS OF FIRST ADMISSIONS, READMISSIONS AND TRANSFERS

Mental Status	First Admissions			Readmissions			Transfers			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T
Idiot	10	8	18	....	....	....	1	....	1	11	8	19
Imbecile	36	42	78	6	1	7	....	....	....	42	43	85
Moron	22	27	49	8	22	30	1	....	1	31	49	80
Borderline .....	....	1	1	....	1	1	....	....	....	....	2	2
TOTALS	68	78	146	14	24	38	2	....	2	84	102	186

TABLE 4
AGE GROUP OF FIRST ADMISSIONS, READMISSIONS AND TRANSFERS

Age Group	First Admissions			Readmissions			Transfers			Totals		
	M	F	T	M	F	T	M	F	T	M	F	T
5 - 9	40	37	77	....	....	....	1	....	1	41	37	78
10 - 14	24	31	55	1	....	1	....	....	....	25	31	56
15 - 19	3	10	13	3	6	9	....	....	....	6	16	22
20 - 24	1	....	1	6	10	16	....	....	....	7	10	17
25 - 29 .....	....	....	....	4	6	10	....	....	....	4	6	10
30 - 34 .....	....	....	....	....	....	....	....	....	....	....	....	....
35 - 39 .....	....	....	....	....	....	....	....	....	....	....	....	....
40 - 44 .....	....	....	....	....	1	1	....	....	....	....	1	1
45 - 49 .....	....	....	....	....	....	....	1	....	1	1	....	1
50 - 54 .....	....	....	....	....	1	1	....	....	....	....	1	1
TOTALS	68	78	146	14	24	38	2	....	2	84	102	186

TABLE 5
DEATHS CLASSIFIED WITH REFERENCE TO CAUSE OF DEATH, AGE,
MENTAL STATUS, YEARS IN RESIDENCE

Cause of Death	AGE	IDIOT			IMBECILE			MORON			Years in Residence
		M	F	T	M	F	T	M	F	T	
22 Vascular Lesions affecting Central Nervous System	11/6 9/2	....	....	....	....	....	1	1	....	1	4 mos. 3/10
26 Arteriosclerotic and Degenerative Heart Disease	42/11 26/9 30/5 25/7	....	1	1	....	1	....	....	....	....	25 15/3 8/2 17/8
31 Pneumonia	12/8 11/11 14 13/11	....	1	1	....	....	....	....	....	....	8/8 6/5 5/3 4/7
41 Congenital Malformations	7/9	....	1	1	....	....	....	....	....	....	2/5
46 All other diseases (Status Epilepticus)	8/3	....	....	....	1	....	1	....	....	....	7 ds.
TOTALS		3	5	8	1	2	3	....	1	1	97/7-7 ds.

TABLE 6
DENTAL CARE

Examinations	1,352
Extractions, Local Anaesthetics	148
Extractions, General Anaesthetics	50
Fillings (Silver)	116
Fillings (Porcelain)	4
Prophylaxis	6
Complete Dentures	1
Partial Dentures	1
Dentures Repaired	7
Gold Inlays	1
X-Rays	7
Gingivectomy	6

DEERHOME, RED DEER

R. R. MACLEAN, M.D.

MOVEMENT OF RESIDENTS

On 31st December, 1958, the number of patients at Deerhome numbered 335 of which 175 were men and 160 women.

There were 355 residents admitted to Deerhome during the year 1958. Of this number, 62 came from the Provincial Training School, Red Deer; 110 from the Provincial Mental Institute, Edmonton; 145 from the Provincial Mental Hospital, Ponoka; 20 from Raymond; 1 from Claresholm; and 16 by direct admission; 1 was readmitted.

Separations from Deerhome numbered seven during the year. Two of these were due to death, five discharged.

Admissions throughout this time were in the main by transfer from other institutions in Alberta, with some admitted directly from private homes. Beds were made available by opening of newly constructed buildings with a few released through deaths and discharges.

ACCIDENTS AND ELOPEMENTS

Since the opening of Deerhome, a number of residents have received injuries either from accidental falls or by interference by other patients. Many of these resulted in minor contusions or lacerations requiring only first aid treatment. A number of epileptic patients sustained lacerations requiring suturing. In addition there were four fractures. These included one fractured hip which required reduction and treatment in the Red Deer Municipal Hospital, and minor fractures requiring X-ray and application of plaster casts in the Parsons' Clinic.

A number of people left the grounds without permission and police assistance was required in returning two people.

GENERAL HEALTH

The health of the patients was generally good. Most of the supervision of the health was carried on by a senior nurse with the weekly visit of a doctor from Parsons' Clinic established after 1st September, 1958.

One patient was admitted to Red Deer Municipal Hospital for treatment of a fractured femur. One female patient was seriously ill with status epilepsy, but recovered with no apparent ill effects. Two people were sent to Ponoka for psychiatric treatment, with satisfactory results. One sterilization procedure was carried out on a male patient, with good recovery. Two patients were sent to Ponoka for surgery; one for cholecystectomy and one for hernia repair.

Physical examinations, blood work and urinalysis were done on as many admissions as possible and a number of conditions such as diabetes and cardiac disease were discovered.

All patients but one were X-rayed by the Mobile Chest Unit in May and follow-up work was done on four patients. No active tuberculosis disease was discovered.

Regular dental clinics every second week were established during the latter half of 1958 with the work being done by a local dentist. Many fillings and treatments were carried out and 42 extractions done.

The local ophthalmologist examined and treated one patient for a serious eye condition.

OCCUPATIONAL THERAPY

There was no organized occupational therapy carried out during this period, but many patients did fancy work under the direction of the nursing staff.

Thirty-six male patients and eighteen female patients were working in institutional services such as laundry, kitchen and outside work at the end of December. Approximately fifty-seven male patients and twenty-nine female patients assisted with work on the wards.

Three women worked regularly at housework in Red Deer, and several men and women did occasional gardening and housework for townspeople.

RELIGIOUS SERVICES

Starting November 1958, the Red Deer Ministerial Association co-operated in providing weekly Protestant church services. These were attended by an average of 115 patients. No arrangements were made for Roman Catholic services, but a list of all Roman Catholic patients was sent to the R.C. Church.

RECREATION

Walking parties were instituted when the first patients were admitted and such parties have been taken out every suitable day since. Group and single special privileges were given to suitable patients—approximately 60 receiving group and approximately 100 receiving single privileges during the period ending 31st December, 1958. Weekly dances were held Saturday afternoons, the music being provided by radio, records or patients playing their own instruments. Mr. Booth's orchestra came from Oliver for the Easter dance and music for Valentine's, Hallowe'en and Christmas was provided by a local orchestra. Occasional talent shows, weiner roasts and sports days were organized. During the summer a temporary baseball diamond and horse shoe pits were set up and used. The new rink was used for skating parties and daily skating.

Television sets, radios and record players were available to the patients and kept in almost constant use.

Two small areas of fenced lawn were planted and used as airing courts for patients unable to participate in walking parties.

Parties of patients were taken to the Red Deer Fair and approximately twelve men attended the local hockey games. At Christmas time a member of the office staff acted as Santa Claus and distributed stockings and gifts on Christmas morning. Local clubs and choirs provided several evenings of carol singing and Christmas entertainment.

BUILDINGS

Three new dormitories were opened and occupied and construction of two additional dormitories commenced. As well, building of two root houses was commenced. Maintenance was carried out on all buildings as required.

GARDENS AND GROUNDS

Two small patches of lawn were planted to provide outdoor space for helpless patients. Considerable preparation of lawn area was carried out with a view to landscaping in the Spring.

STAFF

In general the health of the staff was good. Chest X-rays were done by the Mobile Clinic in May and recommended follow-up work carried out. No active tuberculosis disease was discovered.

T.A.B.T. vaccine and polio vaccine were given to most staff and staphylococcus toxoid given where recommended by a doctor.

There was no difficulty in filling any vacancies which occurred.

VISITORS

The Minister of Public Health and the Deputy Minister visited during the year.

The Director of Mental Health visited regularly.

The annual visit was made by the Visiting Board.

TABLE 1
MOVEMENT OF POPULATION DURING 1958

	M	F	T	M	F	T
In residence 31st December, 1957 .....	....	....	....	....	....	....
ADMISSIONS:						
From P.M.H., Ponoka	81	64	145			
From P.T.S., Red Deer	41	21	62			
From P.M.I., Edmonton	58	52	110			
From Raymond .....	....	20	20			
From Claresholm .....	....	1	1			
Direct	6	10	16			
Re-admitted .....	....	1	1	186	169	355
Returned from L.O.A.	30	30	60			
Returned from P.M.H. ....	....	4	4			
Returned from R.D.M.H.	1	....	1			
Returned from P.T.S.	1	....	1	32	34	66
	218	203	421	218	203	421
SEPARATIONS:						
Formal discharges	1	4	5			
On L.O.A.	39	33	72			
Deaths	1	1	2			
To P.M.H. for treatment or surgery .....	....	5	5			
To Red Deer Municipal Hospital	1	....	1			
To P.T.S. for surgery	1	....	1			
	43	43	86	43	43	86
Total in residence 31st December, 1958				175	160	335

TABLE 2

ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

325.0	Idiocy	40
325.1	Imbecility	193
325.2	Moron	99
325.3	Borderline Intelligence	6
325.4	Mongolism	17
		<hr/> 355

TABLE 3

CAUSES OF DEATH DURING 1958

ABRIDGED INTERNATIONAL CLASSIFICATION

DISEASE	Male	Female	Total
31 Pneumonia	1	1	2

TABLE 4

CLASSIFICATION OF DEATHS ACCORDING TO ORIGINAL PSYCHIATRIC
DIAGNOSIS, 1958

DISEASE	Male	Female	Total
Mental Deficiency	1	1	2

THE EUGENICS BOARD

The Eugenics Board for the Province of Alberta held thirteen meetings during the year 1958. These meetings were held at the Provincial Mental Hospital, Ponoka, the Provincial Training School, Red Deer, and the Provincial Mental Institute, Edmonton. The dates of the meetings held during 1958 were as follows:

January 10th, 1958	-	The Provincial Mental Institute, EDMONTON
April 10th, 1958	- -	The Provincial Mental Institute, EDMONTON
April 11th, 1958	- -	The Provincial Mental Hospital, PONOKA
April 11th, 1958	- -	The Provincial Training School, RED DEER
June 5th, 1958	- - -	The Provincial Mental Institute, EDMONTON
June 6th, 1958	- - -	The Provincial Mental Hospital, PONOKA
June 6th, 1958	- - -	The Provincial Training School, RED DEER
September 11th, 1958	The	Provincial Mental Hospital, PONOKA
September 11th, 1958	The	Provincial Training School, RED DEER
October 16th, 1958	-	The Provincial Mental Institute, EDMONTON
November 27th, 1958	-	The Provincial Mental Institute, EDMONTON
November 28th, 1958	-	The Provincial Mental Hospital, PONOKA
November 28th, 1958	-	The Provincial Training School, RED DEER

The Board considered a total of 191 cases, four of which were re-presented. Of the 187 cases which were passed by the Board in accordance with the Sexual Sterilization Act (1955-C.311, S.5), 116 were male and 71 female. Of this number 30 were passed subject to their own consent.

Of the 187 cases passed by the Board during the year, 101 had been first examined at a Provincial Guidance Clinic, although some of these had been institutionalized prior to presentation. This group of 101 cases was made up of 62 males and 39 females.

OPERATIONS

Operations were performed on 107 cases during the year, 54 being male and 53 female. All of these operations were performed at the Provincial Mental Institute, Edmonton, the Provin-

cial Mental Hospital, Ponoka, and the Provincial Training School, Red Deer, with the exception of one case which was operated upon at the University of Alberta Hospital, Edmonton, by request and by special financial arrangement.

The surgical operations mentioned above were performed by the Surgeons of the Board.

APPRECIATION

As in previous years the Eugenics Board wishes to express its sincere appreciation and thanks to the Director, Division of Mental Health, to the Medical Superintendents and their staffs, to the Guidance Clinics, and to the Surgeons, for their co-operation in connection with the work of the Eugenics Board.

TABULAR SUMMARY

A tabular summary of the work of the Provincial Eugenics Board to December 31st, 1958, is appended.

CASES PRESENTED AND PASSED

(To 31st December, 1958)

Years	YEARLY TOTALS			CUMULATIVE TOTALS		
	Male	Female	Totals	Male	Female	Totals
1929-1933	87	201	288	87	201	288
1934-1938	557	438	995	644	639	1283
1939-1943	339	299	638	983	938	1921
1944	56	73	129	1039	1011	2050
1945	54	64	118	1093	1075	2168
1946	52	53	105	1145	1128	2273
1947	38	53	91	1183	1181	2364
1948	37	68	105	1220	1249	2469
1949	52	57	109	1272	1306	2578
1950	37	60	97	1309	1366	2675
1951	34	48	82	1343	1414	2757
1952	21	36	57	1364	1450	2814
1953	43	38	81	1407	1488	2895
1954	41	40	81	1448	1528	2976
1955	61	48	109	1509	1576	3085
1956	38	34	72	1547	1610	3157
1957	46	82	128	1593	1692	3285
1958	116	71	187	1709	1763	3472

OPERATIONS ONLY

(To 31st December, 1958)

Years	YEARLY TOTALS			CUMULATIVE TOTALS		
	Male	Female	Totals	Male	Female	Totals
1929-1933	48	158	206	48	158	206
1934-1938	198	240	438	246	398	644
1939-1943	122	151	273	368	549	917
1944	13	27	40	381	576	957
1945	18	29	47	399	605	1004
1946	24	31	55	423	636	1059
1947	16	15	31	439	651	1090
1948	16	22	38	455	673	1128
1949	20	27	47	475	700	1175
1950	21	46	67	496	746	1242
1951	16	41	57	512	787	1299
1952	6	18	24	518	805	1323
1953	21	30	51	539	835	1374
1954	37	25	62	576	860	1436
1955	45	25	70	621	885	1506
1956	22	24	46	643	909	1552
1957	49	33	82	692	942	1634
1958	54	53	107	746	995	1741

NATIONAL HEALTH GRANTS

Since 1948 the Federal Government has made a series of Health Grants available to the provinces. These relate to various specific problems such as General Public Health, Venereal Disease Control, Hospital Construction, etc. Within these grants the province may prepare a project in which it is proposed that a new health service may be financed. If the project comes within the terms of the federal regulations, it is approved by the federal authorities and the money becomes available to reimburse the province for its expenditure.

In most of the grants the project covers the entire cost of the service as outlined in the project but it is required by the federal authorities, that their grant be matched in the Venereal Disease, Cancer Control, Laboratory and Radiological Services and Hospital Construction Grants, except for equipment and professional training supplied under these grants.

The following table shows the amount of these grants for 1958-59, the amount that was committed under the various projects, the amount actually expended and the percentage of the various grants that was expended. It should be noted that Alberta collected 86.7% of its available grant, being the second highest province in this regard.

NATIONAL HEALTH GRANTS

ALBERTA

1958-59

Grant	Amount of Grant	Amount Committed	Amount Expended	Percentage of Grant Expended
Crippled Children	\$ 37,368.00	\$ 37,368.00	\$ 37,368.00	100%
Professional Training	37,368.00	36,859.87	35,867.26	95.9%
Hospital Construction	1,540,190.00	1,208,112.76	1,139,341.92	73.9%
Venereal Disease Control	37,368.00	37,368.00	37,368.00	100%
Mental Health	561,192.00	560,716.95	540,699.17	96.3%
Tuberculosis Control	249,791.00	236,541.59	229,506.34	91.8%
General Public Health	617,000.00	616,757.88	616,757.88	99.9%
Cancer Control	251,686.00	251,686.00	251,686.00	100%
Laboratory and Radiological Services	528,000.00	507,652.06	492,641.27	93.3%
Medical Rehabilitation	72,665.00	37,702.00	29,647.50	40.8%
Child and Maternal Health	110,853.00	99,387.43	95,539.34	86.1%
TOTALS	\$4,043,481.00	\$3,630,152.54	\$3,506,422.68	86.7%

Again, this training plan was approved in principle by the Minister of Health of this province, and we are most grateful for the continued interest of the Minister and Deputy Minister of Health in the many aspects of the Blood Transfusion Service work in Alberta.

VOLUNTARY BLOOD DONATIONS

The total number of blood donations received during 1958 amounted to 56,872, as compared to:

54,027 in 1957
54,116 in 1956
51,156 in 1955
54,330 in 1954

The number of bottles collected in the north and south is shown in Table 1.

TABLE 1
BOTTLES COLLECTED, 1958

Jan. 1 to Dec. 31 (inclusive)	Permanent and City Mobiles		Field Mobile Clinics		
Northern Alberta	11,514	+	16,197	=	27,711
Southern Alberta	13,048	+	16,113	=	29,161
Total	24,562	+	32,310	=	56,872

BLOOD TRANSFUSIONS

In Northern Alberta during 1958, 19,959 five hundred cc. bottles of blood and 157½ bottles of packed cells were administered to a total of 9,382 patients.

In Southern Alberta during the same period, 14,445 five hundred cc. bottles of blood were administered to a total of 7,005 patients.

FRESH PLASMA

The demand for freshly frozen plasma has increased over the past year, such plasma being used mainly for the treatment of hemophilia. One patient alone, Mr. T. M., suffering from hemophilia, has received a total of 150 bottles of fresh plasma during 1958 alone.

PLASMA FOR FRACTIONATION PRODUCTS

The increasing demand for whole blood transfusions has limited the amount of excess product available for liquid plasma. In 1958, only 246 four-litre pools were shipped from Edmonton to the Connaught Laboratories in Toronto, as compared to 258 pools in 1957 and 402 in 1956.

During 1958 the Calgary depot shipped 298 four-litre pools, as compared to 342 plasma pools in 1957 and 447 in 1956.

RH AND OTHER BLOOD GROUP INVESTIGATIONS
(OBSTETRICAL CASES, ETC.)

In the Edmonton laboratories, 24,254 antenatal and postnatal blood samples were investigated during 1958; 23,589 having been tested in 1957, and 24,020 in 1956.

In the Calgary laboratories, 15,155 antenatal and postnatal blood samples were tested in 1958, as compared to 14,672 in 1957 and 13,413 in 1956.

In conclusion, we should like to express our deep appreciation for the fine work of many volunteers, and to the staffs of the two depots we extend our sincere thanks for a job well done—often under difficult circumstances.

BLOOD TRANSFUSION SERVICE

D. I. BUCHANAN, M.D., D.P.H., *Edmonton*

E. W. NATION, M.B., M.R.C.P., *Calgary*

In reviewing the 1958 program, we find that an average of 533 donors attended clinics each week in Edmonton and the main centres of population from Red Deer northwards; while the corresponding total was 560 donors per week in Calgary and the south.

Once again we have great pleasure in congratulating all concerned, and had it not been for an extensive outbreak of infectious hepatitis, particularly affecting many in the Lethbridge area, the yearly total of blood donations received in the south of the province might well have exceeded 30,000.

It was with regret that we learned of Mr. John Blackburn's resignation as Chairman of the Donor Committee in the Edmonton region. In January 1958, Mr. Blackburn and his committee members instituted a drive for new donors that was most successful, and had it been possible to sustain this work on a suitable scale throughout the year, the weekly average of donors attending clinics in the north would have been much closer to 700, and the north of the province might also have achieved an annual total of about 30,000.

As strange as it may seem, in November 1958 the Edmonton laboratory issued some 200 more bottles of crossmatched blood than we had collected during the month—this being made possible only by the undesirable practice of re-crossmatching and re-issuing bottles returned from the major Edmonton city hospitals during that month. A similar situation also occurred during the months of May, July, August, and October.

With the increasing demands for fresh "platelet rich" transfusions, as well as for regularly obtained blood, the northern half of the province and Edmonton in particular, is greatly in need of a revitalized donor procurement program. It is suggested that long-term planning is necessary for Edmonton City and district, and a close watch must be kept on "weekly quotas" to avoid "feast or famine" in the number of donors attending succeeding sessions.

For the past two years, 1957 and 1958, the Government of the Province of Alberta has provided an annual grant of \$100,000.00 towards the operational expenses of the Blood Transfusion Service in this province.

In conjunction with the Department of Extension of the University of Alberta, a one-year training course for student technicians was begun in 1957, the first students graduating towards the end of 1958. It is felt that this pilot project has been most successful and that it should be continued on a permanent basis.

PART II

ANNUAL REPORT

OF THE

HOSPITALS DIVISION

OF THE

DEPARTMENT OF PUBLIC HEALTH
PROVINCE OF ALBERTA

1958

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HOSPITALS DIVISION

J. D. CAMPBELL, B.Com., M.Com., F.C.A., R.I.A., *Director*

I. THE ALBERTA HOSPITALIZATION PLAN

The present annual report is a factual analysis of the various aspects of hospitalization and hospital experience in Alberta during 1958.

On 1st April, 1958, the Provincial-Municipal Hospitalization Plan which was introduced in Alberta in 1950 was replaced by the Alberta Hospitalization Plan. Although the new plan was initially implemented by the Government of Alberta, on 1st July, 1958, the Federal Government agreed to share in the cost of insured hospital services incurred by the Province in providing inpatient services to its residents.

1. ADMINISTRATIVE RESPONSIBILITY

Duties of the Hospitals Division

The Hospitals Division of the Department of Public Health is responsible for administering the Alberta Hospitalization Plan as set out under The Hospitalization Benefits Act. With the exception of mental hospitals and tuberculosis sanatoria the duties and powers of the Hospitals Division extend to the following areas:

- (a) Approval of location and construction of hospitals.
- (b) Training of hospital personnel to the extent that training costs are treated as a hospital cost.
- (c) Determination, approval and maintenance of adequate standards of service rendered within a hospital.
- (d) Provision of consulting services involving the operation of a hospital to the extent and at such times as it is considered necessary.
- (e) The inspection and supervision of hospitals other than in respect to medical services rendered by the hospital medical staff.
- (f) The paying of hospitals for insured services and the approval of rates determined.
- (g) The approval of all hospitals and nursing training schools.
- (h) The administration and the enforcement of the regulations made by the Lieutenant Governor-in-Council under The Hospitalization Benefits Act.
- (i) Administration of the Agreement with the Government of Canada respecting contributions under the Hospital Insurance and Diagnostic Services Act.

(j) To administer and to enforce:

- The Hospitalization Benefits Act
- The Municipal Hospitals Act
- The Maternity Hospitalization Act
- The Private Hospitals Act

The Director of the Hospitals Division is the Provincial Authority and acts as the liaison officer in all matters pertaining to hospitalization. The Director of the Medical Services Division acts in an advisory capacity to the Hospitals Division.

Consulting and Supervisory Services to Hospitals

The Hospitals Division maintains a close supervision of administration of hospitals. The Municipal Hospitals Act governs the election of hospital boards of municipal hospitals and the Department establishes the number of members comprising each board. The appointment of secretary-treasurers and auditors must be approved by the Department. Hospital accounting schools have been held in the past to instruct secretary-treasurers and accountants in uniform hospital accounting.

Hospital inspectors are employed by the Hospitals Division to advise and supervise hospital staff in matters related to administration. Services of technicians from the X-ray and Laboratory School have been utilized on a part-time basis to visit hospitals. Consideration is being given to the extension of consulting services in conjunction with the Associated Hospitals of Alberta.

2. COVERAGE

Alberta Residents

Under the Alberta Hospitalization Plan all persons who are legally entitled to reside in Canada and who make their home and are ordinarily present in the Province of Alberta, together with their dependents, are entitled to insured services at any approved hospital of their choice. The guide used for determining a dependent is the income tax status of the individual. This is in contrast to the Provincial-Municipal Hospitalization Plan which covered only ratepayers and contract holders at a hospital that had an agreement with the local municipality, except in referred and emergency cases.

There are no limitations on the length of stay for which the patient is eligible for benefits, provided that the patient requires active treatment care. Patients who are judged to be no longer in need of active treatment care are charged the full rates applicable to non-residents. There are also no age restrictions and no excluded conditions or waiting periods due to pre-existing conditions.

A minority group of Alberta residents who are excluded from benefits under the plan fall under one of the following categories:

- (a) Persons who are entitled to receive or are receiving hospital benefits from the Government of Canada;
- (b) Persons who are entitled to receive hospital benefits from the Workmen's Compensation Board; and

- (c) Persons who the reports of the attending physician and the hospital records indicate and the Director of the Medical Services Division of the Department of Health decides, are no longer in need of active treatment hospitalization.

Change of Residency

A resident of Alberta moving to another Province participating in hospitalization insurance is covered under the Plan for the period it takes to become eligible for insured benefits in the new Province. The amount paid for hospital benefits in such a case will be commensurate to the cost of hospitalization, less authorized charges, in a hospital of equivalent size in Alberta.

Persons moving to Alberta from other Provinces which extend hospital benefits to their residents for a period after moving from the Province are not eligible for benefits under the Alberta Plan until the entitlement from the Province from which they have moved has expired.

An Alberta resident who moves to a Province that has not entered into a hospitalization agreement with the Government of Canada, or moves his residence to another country, is not eligible for benefits under the Alberta Plan.

Patients classified as tourists, transients, or visitors are excluded from all benefits.

Out-of-Province Benefits

A resident and his dependents qualify for hospitalization benefits in hospitals outside of Alberta where the treatment received is an emergency or referred case, or where the hospital in which the patient is hospitalized is more accessible than one of the approved hospitals of Alberta.

An emergency case means a person eligible for benefits under the Alberta Plan who, while temporarily away from Alberta, becomes acutely ill and needs active treatment hospital care, but because of his condition is incapable of returning to a hospital in Alberta. Emergency care does not provide coverage for those women who leave Alberta with the intention of taking maternity hospitalization in hospitals outside Alberta.

"Temporarily away" refers to those residents of the Province who are absent from Alberta on holiday, visit, educational or business engagement for a period of not longer than twelve consecutive months and who intend to return to Alberta. The following are exceptions:

- (a) A person who leaves Alberta for the express purpose of furthering his education and who is not gainfully employed outside Alberta except with vacation employment; and
- (b) A member of the Canadian Armed Forces who was a resident of Alberta at the time of his enlistment.

A referred case is a resident who has been referred to a hospital outside the Province by an Alberta doctor for treatment

of a condition which has been approved by the College of Physicians and Surgeons and for which no treatment is available in an Alberta hospital.

The Hospitals Division maintains close liaison with the College of Physicians and Surgeons, and doubtful referrals are forwarded to them for their investigation as to whether or not the treatment given the patient could have been provided in the Province of Alberta.

Outpatient Services

During 1958 outpatient services were not covered under The Hospitalization Benefits Act.

Chronic Care

Although chronic care patients were not eligible for insured services in 1958, in view of the fact that in 1959 certain categories of chronic patients would be approved for eligibility, the Hospitals Division conducted a preliminary survey of the needs for chronic care in Alberta. The survey indicated that approximately 3,000 beds would be required.

Treaty Indians

Under the Federal - Provincial hospitalization agreement which became effective July 1st, 1958, Treaty Indians on or off a reserve were considered residents of the Province for hospitalization purposes and were eligible for hospital benefits under the Alberta Hospitalization Plan. Prior to July 1st, 1958, the Federal Department of National Health and Welfare had assumed responsibility for the hospitalization costs of Treaty Indians hospitalized in the active treatment hospitals in Alberta.

3. BENEFITS

Insured Services

Insured services means the level of services for inpatients for which payment will be made by the Province and to which a resident is entitled under The Hospitalization Benefits Act without charge other than the payment of the authorized charges (see page 5).

The insured services include:

- (a) Bed accommodation and meals at standard or public ward level.
- (b) Necessary nursing service.
- (c) Laboratory, radiological and other diagnostic procedures together with the necessary interpretations.
- (d) Drugs, biologicals and related preparations when administered in a hospital and are necessary for the proper treatment of the patients.
- (e) Use of operating room, case room and anaesthetic facilities including necessary equipment and supplies.

- (f) Routine surgical supplies.
- (g) Use of radiotherapy and physiotherapy facilities where available.
- (h) Services rendered by persons who receive remuneration from the hospital; and
- (i) Such other services as are specified in an agreement.

Exclusions

The Alberta Plan does not provide private or semi-private ward accommodation. If the patient requests such accommodation, he will pay the additional charges made by the hospital for this class of accommodation over and above the charge for standard ward accommodation.

Exclusions with regard to drugs are as follows:

- (a) Drugs, biologicals and related preparations which are intended for use after discharge from hospital; and
- (b) Drugs, which in the opinion of the hospital pharmaceutical committee of hospitals having 180 beds and over, and the Joint Pharmacy Committee of the College of Physicians and Surgeons of Alberta and the Alberta Hospital Association in the case of hospitals having less than 180 beds, are not required for the proper treatment of the patient under the standard ward inpatient care.

Outpatient services with some exceptions coming into effect in 1959 are excluded. Doctors' fees and ambulance services are also excluded.

4. FINANCING HOSPITALIZATION

The hospitalization plan in Alberta represents an adjustment in sharing costs. The individual patient or his agent, the municipality, the Provincial Government, and the Federal Government all share in the financing of hospitalization in Alberta.

Payments by Patients—Coinsurance

The patient's direct share of the cost of hospitalization is fixed and is based on the rough approximation of the additional cost incurred by the hospital as a result of having the patient hospitalized.

An eligible inpatient is charged a daily fee, known as a coinsurance payment, at a rate depending in amount on the size of the hospital determined by its rated bed capacity. A non-eligible inpatient is charged at a flat rate based on the size of the hospital determined by the rated bed capacity of the hospital at the same level of services as is given to the eligible inpatient.

The daily rates charged to inpatients in active treatment hospitals are shown in Table 1.

TABLE 1
DAILY RATES CHARGED TO PATIENTS AT STANDARD WARD LEVEL
IN ACTIVE TREATMENT HOSPITALS

Size of Hospital	Eligible Patient		Non-eligible Patient	
	Adults and Children	Newborn	Adults and Children	Newborn
1 - 29 Beds	\$1.50	\$1.00	\$11.00	\$3.00
30 - 89 Beds	\$1.60	\$1.00	\$11.50	\$3.00
90 - 179 Beds	\$1.80	\$1.00	\$13.00	\$3.00
180 Beds and Over	\$2.00	\$1.00	\$15.00	\$3.00

After 30 days of hospitalization a newborn is classified as a child and is thereafter charged the rates applicable to adults and children.

Payments by Municipalities

The municipalities' portion of the cost of hospitalization falls under the following headings:

(1) Operating Costs

The municipalities' contribution to the operating costs of hospitalization is set at a maximum of an annual amount equal to a levy of 3 mills based on an equalized assessment. For the period after April 1st, 1958, the municipalities' share ($\frac{3}{4}$ of the normal annual levy) amounted to \$2,961,718.60.

The municipal contributions to hospitals during the first quarter of 1958, during which hospitalization was still provided under the Provincial-Municipal plan, amounted to \$1,131,929.15. The rate of levy applied during the first three months in the various municipalities ranged from two mills to sixteen mills or higher on an annual basis.

(2) Capital Costs

The responsibility for hospital capital costs under the Provincial-Municipal Plan rested with the owners of the hospital. The capital costs of municipal hospitals were covered by the municipalities, and provision was made for voluntary capital depreciation agreements between non-municipal hospitals and municipalities.

For the nine months of 1958 during which the Alberta Hospitalization Plan was in effect, where a resident of a municipality was admitted to an approved hospital other than its own, the municipality was required to pay a capital charge to the hospital for each day of the resident's hospitalization. The Department of Public Health paid the capital charges for patients who qualified as residents of the Province but not as residents of a municipality.

The rate of the capital charge for each hospital was prescribed by the Minister and was based on the amount of the hospital's annual debenture interest and principal payments, plus the equipment depreciation allowance.

(3) *Excess Costs*

The owners of a hospital are required to cover any excess operating costs as determined by the Director of the Hospitals Division.

The excess costs of the approved hospitals of Alberta for the nine months ending 31st December, 1958, amounted to \$731,469.26 of which the municipalities absorbed \$548,133.85 and the private institutions \$183,335.41.

Payments by the Province

The patients and the municipalities, as outlined above, absorb a fixed share of the operating costs of hospitalization; the Province accepts the residual share of the approved costs of operation.

(1) *Basic Monthly Payment*

An approved hospital is paid a basic monthly payment on account representing an estimate of one-twelfth of the annual residual approved operating costs of that approved hospital, less the amounts which are charged by the approved hospital to non-eligible patients and charges to eligible patients for items not covered under the hospitalization plan.

Each hospital is dealt with as a separate unit with the costs of providing insured services for the 1957 calendar year representing the basic standard for payment for 1958. Adjustments are made to the basic standard in 1958 where the individual approved hospital can justify the increased costs as being reasonable in light of changes in economic conditions and for type of services rendered. The basic monthly rate may be reduced if, upon investigation, it is found that the costs incurred by the approved hospital are unreasonable even though they are below the maximum amount set.

Total basic monthly payments, including adjustments, by the Department of Public Health from the period 1st April to 31st December, 1958, amount to \$17,978,469.00 (see Tables 4 and 26).

(2) *Assumption of Coinsurance Payments*

Under the Alberta Plan, the Department of Public Health pays the coinsurance charges for resident inpatients coming under the following categories:

- (a) Poliomyelitis.
- (b) Provincial social welfare recipients.
- (c) Patients authorized by the Arthritis clinic.
- (d) Patients who have been approved for treatment by the Cancer Clinic, for a period up to seven days.
- (e) Maternity patients for a period up to twelve days together with the newborn for a similar period.

Coinsurance payments by the Department of Public Health on behalf of the patients mentioned above amounted to

\$957,225.30 during 1958. The breakdown of the cost of coinsurance to the Province is shown in Table 2.

TABLE 2
BREAKDOWN OF CO-INSURANCE DAYS AND PAYMENTS BY THE PROVINCE
BY TYPE OF BENEFIT AND BED SIZE, APRIL - DECEMBER, 1958

Type of Benefit	Paid Days	Total Amount	SIZE OF HOSPITAL BY BED CAPACITY			
			1 - 29	30 - 89	90 - 179	180 and Over
Maternity	183,320	\$335,617.50	\$ 29,509.50	\$ 75,562.80	\$ 16,765.20	\$213,780.00
Pensioners	216,095	387,539.90	44,514.00	107,390.70	26,251.20	209,384.00
Cancer	10,154	20,185.10	48.00	370.50	120.60	19,646.00
Arthritis	735	1,469.40	.....	.....	5.40	1,464.00
Polio	16,750	32,453.40	21.00	105.60	9,118.80	23,208.00
Newborn	179,960	179,960.00	18,897.00	45,061.00	9,040.00	106,962.00
Total	607,014	\$957,225.30	\$ 92,989.50	\$228,490.60	\$ 61,301.20	\$574,444.00

(3) Capital Costs

The Province was responsible for the payment of patient day capital charges of patients whose residency in a particular municipality could not be determined but whose residence requirements were met as far as the Province was concerned.

The total amount paid by the Province on behalf of these patients amounted to \$138,384.70 in 1958 (see Tables 4 and 26).

(4) *To hospitals Outside Alberta and Federal Hospitals Within Alberta*

The Province pays for hospital benefits of its residents hospitalized outside Alberta or in the Federal Hospitals within Alberta the maximum rates for standard ward services shown in Table 3.

TABLE 3
MAXIMUM RATES PER PATIENT DAY PAYABLE TO ACTIVE TREATMENT HOSPITALS
OUTSIDE ALBERTA AND TO FEDERAL ACTIVE TREATMENT HOSPITALS
WITHIN ALBERTA

Size of Hospital	Adults and Children	Newborn
1 - 29 beds	\$ 9.50	\$2.00
30 - 89 beds	\$ 9.90	\$2.00
90 - 179 beds	\$11.20	\$2.00
180 beds and over	\$13.00	\$2.00

The coinsurance payable by the above patients is equivalent to coinsurance payments charged to residents hospitalized in Alberta hospitals.

Where the actual charges made by a hospital reduced by the coinsurance rates payable by the patient are less than Alberta's maximum rates, then the actual charges made by the hospital less the coinsurance are paid. Where the actual charges are more than Alberta's maximum rates, then the excess charges are paid by the patient.

The cost of out-of-province hospitalization for the nine months' period April to December, 1958, amounted to \$76,224.12. Payments to Federal Hospitals totalled \$539,122.09 (see Tables 4 and 45).

(5) Hospital Indigents—Bad Debts

Under the Alberta Hospitalization Plan, the individual hospital's basic payment is adjusted for unpaid accounts receivable arising from April 1st, 1958. If, after six months, the account is still unpaid and the hospital has followed a given collection procedure, the Department of Public Health will pay 50% of the amount outstanding.

If the hospital collects the whole of the outstanding account at a date later than six months, it will retain the excess.

The Provincial share of uncollectible accounts amounted to \$16,365.40 in 1958 (see Tables 4 and 26).

(6) Contract Hospitals

There are two hospitals in Alberta which fall under this category: Beulah Home at Edmonton and St. Martin's Hospital at Desmarais. The Province pays \$2.50 a day for adults and children and \$2.00 per day for newborns to St. Martin's Hospital. The Province pays \$9.50 a day for a maternity case and \$2.00 per day for newborns to Beulah Home.

The total amount paid to these hospitals in 1958 was \$13,208.95, of which \$3,357.45 was paid to St. Martin's and \$9,851.50 to Beulah Home (see Table 45).

(7) Summary Breakdown of Provincial Expenditure

Total expenditure by the Province for various hospitalization programs during the calendar year 1958 (excluding expenditure on mental, tuberculosis and cancer hospitalization) amounted to \$24,282,457.09. Hospital construction grants amounted to \$423,094.16.

Table 4 gives a breakdown of the Province's expenditures on hospitalization services in 1958.

TABLE 4
BREAKDOWN OF PROVINCIAL EXPENDITURES ON HOSPITALIZATION
SERVICES, 1958

TYPE OF PAYMENT	1958
To Local Authorities (1)	1,697,893.72
To Approved Hospitals:	
Provincial-Municipal Plan	2,280,905.05
Alberta Hospitalization Plan:	
Coinsurance	957,225.30
Basic Payment	17,978,469.00
Bad Debts	16,365.40
Capital Charges	158,384.70
Nurses' Training Grants	140,100.00
University Outpatient Clinic	15,078.00
To Contract Hospitals	13,208.95
To Federal (D.V.A.) Hospitals	276,309.09
To Federal (Indian) Hospitals	262,813.00
To Out-of-Province Hospitals (2)	76,224.12
Home Confinement	6,386.50
Total on Services	23,859,362.93
Construction Grants (1958-59) (3)	423,094.16
GRAND TOTAL	24,282,457.09

(1) Includes payment to local authorities for out-of-province hospitalization.

(2) Payment to Lloydminster situated in Saskatchewan is included with Approved Hospitals.

(3) Does not include the Federal share of construction grants paid by the Province.

II. GENERAL INFORMATION ON APPROVED HOSPITALS

The statistical data presented in this section of the annual report have been collected from monthly returns of inpatients and annual general schedules completed by each approved hospital.

1. *Approved Hospitals*

Approved hospitals are active treatment hospitals in Alberta and the Lloydminster hospital situated in Saskatchewan which have been approved by the Minister of Health for the purposes of the Alberta Hospitalization Benefits Act. Not included in 1958 under approved hospitals are auxiliary (chronic) hospitals, mental hospitals, tuberculosis sanatoria, private hospitals and nursing homes. Whenever statistical information on Lloydminster hospital is used, it includes only the information pertaining to Alberta residents. Except where otherwise indicated, statistical data in this part of the report excludes Contract and Federal Hospitals.

Approved hospitals in Alberta number 101 and are classified into four bed-size groups: 1-29 beds, 30-89 beds, 90-179 beds, and 180 beds and over. In addition to these 101 approved hospitals there are also 2 Contract Hospitals, 4 Federal Indian Hospitals and 2 Federal D.V.A. Hospitals. During 1958 Alberta approved hospitals, bed capacity, patients and hospital days were distributed among the four hospital groups as indicated in Table 5:

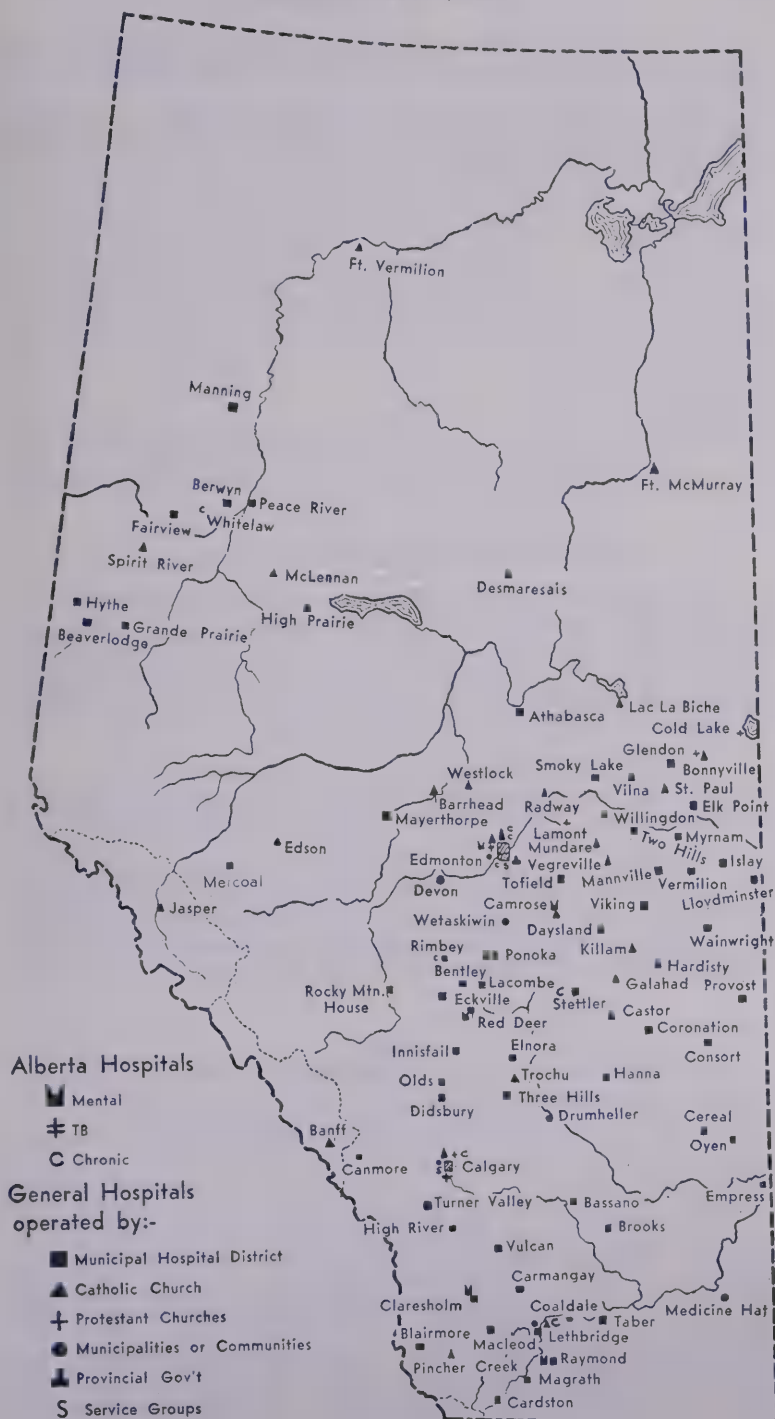
TABLE 5
PERCENTAGE DISTRIBUTION OF APPROVED HOSPITALS, BED CAPACITY,
CASES AND DAYS BY BED SIZE, 1958

Size	Hospitals	Bed Capacity	Adults and Children		Basinet Capacity	Newborn		Staff
			Cases	Days		Cases	Days	
1 - 29 beds	44.6	11.3	13.2	10.0	17.5	10.1	10.2	8.4
30 - 89 beds	41.6	26.8	30.3	25.6	32.8	24.7	24.7	18.1
90 - 179 beds	5.0	7.3	5.7	5.9	5.8	4.6	4.8	5.6
180 beds and over	8.9	54.6	50.7	58.5	44.0	60.6	60.4	67.9

2. *Municipal Hospital Districts and Hospitals Operating in 1958*

The municipal hospital districts of Wood Buffalo, Elk Island and Waterton Parks were created in 1958, thereby increasing the total number of municipal hospital districts to 76. As of December 31st, 1958, there were 59 municipal hospital districts operating their own hospitals, 9 had no hospitals, and the rest were served by voluntary hospitals.

Drayton Valley Municipal Hospital began operating in August 1958. Canmore Hospital, previously operated as an industrial hospital became a municipal hospital on 1st April, 1958. St. Martin's Hospital, Desmarais, and Beulah Home, Edmonton, previously classified as "Denominational" and "Service Group" respectively were reclassified as "Contract" hospitals. The Hythe Sub-hospital was regarded in previous years as a division of the Grande Prairie Municipal Hospital, but in 1958 was classified as



a separate hospital. Federal Hospitals are shown in Table 6, but unless specified, are not included elsewhere in the tables.

Table 6 shows the number and bed capacity of hospitals operating in Alberta by type of ownership as at December 31st, 1958 (see also Map on page 11).

TABLE 6
APPROVED HOSPITALS OPERATING IN ALBERTA BY TYPE OF OWNERSHIP, 1957-1958

Type of Ownership	Hospitals		Bed Capacity	
	1957	1958	1957	1958
Municipal	57	60	2293	2342
Municipal and Community	5	5	1316	1470
Denominational	35	34	2456	2468
Service Group	2	1	162	156
Provincial	1	1	827	1005
Industrial	1	.....	12	.....
Contract Hospitals .....	.....	2	.....	20
Federal Hospitals	6	6	911	911
Total	107	109	7977	8372

3. Rated Bed Capacity and Beds Set Up

The rated bed capacity of a hospital represents the number of beds that a hospital is designed to accommodate on the basis of established standards of floor space area and approved by the Minister. Number of beds set up (or bed complement) shows the number and types of beds actually set up for the accommodation of inpatients at midnight, December 31st.

Alberta's hospital experience over the past ten years, 1949-1958, shows that the number of beds actually set up for use has exceeded the bed capacity of its active treatment hospitals.

Table 7 shows that as at December 31, 1958, there were 245 more beds and cribs, and 17 more bassinets set up for use than the bed capacity of the hospitals. However, the actual difference and the percentage difference between bed complement and bed capacity shows a decrease over the past ten years.

TABLE 7
ACTIVE TREATMENT HOSPITAL BED CAPACITY AND BEDS SET UP, 1949-1958
(Excluding Chronic and Domiciliary Beds and Federal Hospitals)

Year	BED CAPACITY (at December 31st)			BED COMPLEMENT (at December 31st)			Actual Difference	Percentage Difference
	Beds and Cribs	Bassinets	Total	Beds and Cribs	Bassinets	Total		
1949	4,684	910	5,594	5,617	1,079	6,696	933	19.9
1950	4,992	945	5,937	5,982	1,107	7,089	990	19.8
1951	5,521	998	6,519	6,239	1,132	7,371	718	13.0
1952	5,752	1,022	6,774	6,159	1,165	7,324	407	7.1
1953	6,371	1,063	7,454	6,810	1,242	8,052	439	6.9
1954	6,546	1,144	7,690	6,910	1,283	8,193	364	5.6
1955	6,866	1,314	8,180	7,142	1,371	8,513	276	4.0
1956	6,939	1,396	8,335	7,096	1,339	8,435	157	2.3
1957	7,066	1,409	8,475	7,270	1,406	8,676	204	2.9
1958	7,461	1,451	8,912	7,706	1,468	9,174	245	3.3

The average number of patients under care daily fluctuates considerably in Alberta Approved Hospitals (see Table 36).

It is inevitable, therefore, that some hospitals would find themselves overcrowded during certain months of the year. The study of individual hospitals shows that although 52 hospitals have reported more beds set up at December 31st than their rated bed capacity (see Table 27), only 9 hospitals had an occupancy of more than 100% of rated bed capacity and 39 hospitals had more than 80% occupancy (see Table 33).

Table 8 is a breakdown of the bed capacity and beds set up of approved hospitals by type of bed and size of hospital:

TABLE 8
BED CAPACITY OF APPROVED HOSPITALS AND BEDS SET UP BY TYPE OF BED
AND SIZE OF HOSPITAL AS AT DECEMBER 31st, 1958

Type of Bed	Total	Size of Hospital by Rated Bed Capacity			
		1 - 29	30 - 89	90 - 179	180 and over
Rated Bed Capacity:					
Medicine and Surgery	4,603	553	1,261	255	2 534
Obstetrics	1,193	151	415	75	552
Children's	1,164	121	276	201	566
Orthopaedics	279	.....	.....	10	269
Psychiatry	51	.....	.....	.....	51
Communicable Diseases	108	13	41	2	52
Other	43	1	4	.....	38
Total	7,441	839	1,997	543	4,062
Beds Set Up:					
Medicine and Surgery	4,824	628	1,430	262	2,504
Obstetrics	1,209	178	405	75	551
Children's	1,177	142	334	165	536
Orthopaedics	279	.....	.....	10	269
Psychiatry	51	.....	.....	.....	51
Communicable Diseases	103	13	36	2	52
Other	43	1	4	.....	38
Total	7,686	962	2,209	514	4,001

4. *Standard of Services Rendered Within Hospitals*

Within the terms of Hospital Regulations set by the Department of Public Health, the level of services within individual hospitals has been established according to the wishes of the community it serves, the policy of the owners of the hospital, and the ability of the hospital to obtain the funds necessary to provide services. Apart from the expected differences in the type of service rendered in the large hospitals with highly specialized departments and the small hospitals, there is a difference in the level of services in hospitals of comparable size.

Table 9 indicates the type of special services available at the hospitals whether or not these are owned by the hospitals or physicians practising in the hospitals. Special services available outside the hospitals are not included.

TABLE 9
SPECIAL SERVICES AVAILABLE WITHIN APPROVED HOSPITALS BY SIZE OF
HOSPITAL, 1958

Type of Service	1958	Size of Hospital by Rated Capacity			
		1 - 29	30 - 89	90 - 179	180 and over
Anaesthesia	96	40	42	5	9
Basal Metabolism Tests	81	30	38	4	9
Dentistry	20	6	6	3	5
Electrocardiography	84	34	37	4	9
Electroencephalography	4	1	...	...	3
Laboratory	99	43	42	5	9
Occupation therapy	3	...	...	1	2
Oxygen therapy	90	40	36	5	9
Pathology	11	...	...	2	9
Physiotherapy—					
Advanced hydrotherapy	7	...	1	1	5
Inducto-thermo-therapy	38	11	17	2	8
Infra-red therapy	57	19	26	3	9
Massage and Manipulation	15	...	6	1	8
Ultra-violet therapy	28	7	10	3	8
Radiology	100	45	41	5	9
Organized blood donor service	6	...	2	2	2
Blood Bank	11	...	3	3	5
Other formal arrangements for blood service	66	30	29	2	5
Hospitals reporting	101	45	42	5	9

During 1958, there were 209 X-ray machines in the approved hospitals of Alberta. Most of the machines (60.8%) were of the stationary diagnostic type. Mobile diagnostic machines accounted for 76 (36.4%) of the total. There were 3 superficial therapy and 3 deep therapy machines, all in the city hospitals.

Of the total number of patients admitted to hospitals, less than $\frac{1}{4}$ had their chests routinely X-rayed on admission. About $\frac{3}{4}$ of the total patients under care were examined (see Table 10). An examination is a procedure involving one completed film or series of films, or one or more exposures of fluoroscopy, directed at one anatomical site or region of the body during one attendance of the patient at the X-ray department (or one elsewhere in the hospital if the mobile equipment is used).

TABLE 10
VOLUME OF RADIOLOGY—DIAGNOSTIC SERVICES TO IN-PATIENTS
BY SIZE OF HOSPITAL, 1958

Size of Hospital	Patients Routinely Chest X-rayed on Admission		Patients Examined		Number of Fluoroscopic Examinations		Films Read	
	Number	% of Total Admissions	Number	% of Total Patients	Number	% of Total Examined	Number	Per Patient Examined
1 - 29 beds	2,116	6.9	13,446	43.1	928	6.9	20,434	1.5
30 - 89 beds	16,229	22.6	45,334	62.2	2,560	5.6	65,964	1.5
90 - 179 beds	2,925	21.5	8,065	58.0	1,314	16.3	19,806	2.5
180 beds and over	29,433	24.2	106,117	85.3	13,836	13.0	222,842	2.1
Total	50,703	21.3	172,962	71.3	18,638	10.8	329,046	1.9

5. Personnel and Paid Hours of Work

This section presents data on persons employed by approved hospitals on a full or part-time basis, for all categories of personnel as at December 31, 1958. Unpaid voluntary workers are excluded. Paid hours of work includes paid holidays and other paid leave.

Paid hours of work in hospitals in 1958 totalled 21,405,062. These hours were distributed amongst the different departments as follows:

TABLE 11
DISTRIBUTION OF PAID HOURS OF WORK AMONG DEPARTMENTS, 1958

	Paid Hours	%
General Administration	1,566,371	7.3
Nursing:		
Direct Care of Patients	9,367,818	43.7
School of Nursing	377,634	1.8
Other Professional Care	3,738,541	17.5
Dietary	2,350,828	11.0
Laundry	936,891	4.4
Bedding and Linen	208,495	1.0
Housekeeping	1,952,976	9.1
Physical Plant	905,508	4.2
Total	21,405,062	100.0

As at December 31st, 1958, there were 11,186 employees at Alberta approved active treatment hospitals, comprising 10,723 full-time and 463 part-time. This is an increase of 807 personnel over 1957. Over the ten year interval from 1949 until 1958 the total number of hospital personnel increased by 5,606 or over 100%.

TABLE 12
NUMBER OF PAID PERSONNEL, FULL-TIME AND PART-TIME, IN APPROVED HOSPITALS AT DECEMBER 31st, 1958 BY TYPE OF PERSONNEL AND SIZE OF HOSPITAL

Type of Paid Personnel	1958	Size of Hospital by Rated Bed Capacity			
		1 - 29	30 - 89	90 - 179	180 and over
Doctors	56	....	....	....	56
Nurses:					
Graduate	2549	259	488	159	1643
Student	1457	....	44	19	1394
Nursing Aides:					
Certified	799	104	230	53	412
Trainee	156	42	67	15	32
Orderlies	254	8	17	12	217
Interns	153	....	....	....	153
Physio therapists	42	....	1	4	37
Occupational therapists	5	....	....	....	5
Pharmacists	26	....	....	3	23
Dietitians:					
Certified	50	6	7	2	35
Other	70	22	41	2	5
Medical Record Librarian:					
Registered	22	2	5	2	13
Other	53	5	17	7	24
Technician—Laboratory:					
Certified	114	5	13	8	88
Other	143	11	26	3	103
—Radiology:					
Registered	62	6	13	7	36
Other	90	9	23	7	51
Comb. X-ray & Lab... ..	32	10	22	....	....
Social Service Workers	5	....	....	2	3
All Other	5048	453	1008	323	3264
Total Personnel	11,186	942	2022	628	7594

For every patient day including newborn days in 1958 there were more than 9 paid hours of work of which more than 4 hours was comprised of direct nursing care (see Table 31). For every 100 adult and children patients in approved hospitals, there were 195.9 employees in 1958, of which 44.6 were graduate nurses, 25.5 were student nurses, 14.0 were certified nursing aides and 2.7 were nursing aide trainees.

Table 12 shows the number of employees in Alberta approved hospitals as at December 31st, 1958, by type of personnel and size of hospital.

6. Nurse Education

There were 11 general hospitals operating Schools of Nursing in 1958. Statistical data on these schools are presented in Table 13.

The total number of student nurses enrolled in 1958 amounted to 1,569 (excluding 11 affiliates at Calgary Crippled Children's), an increase of 43 students over 1957.

TABLE 13
SCHOOLS OF NURSING*—1957 and 1958

School of Nursing Operated by	No. of Students Enrolled		No. of Nurses Graduated		Hours of Work of Paid Personnel, 1958	
	1957	1958	1957	1958	Total	Per Student Enrolled
Calgary, General	259	275	65	64	56,504	205
Calgary, Holy Cross	165	186	55	42	63,571	342
Edmonton, General	176	170	54	52	52,682	310
Edmonton, Misericordia	103	103	32	26	21,894	213
Edmonton, Royal Alexandra	216	200	52	72	26,137	131
Edmonton, University	312	327	91	105	87,412	267
Lamont, Archer Memorial	38	35	14	16	4,668	146
Lethbridge, Municipal	88	87	22	30	16,337	188
Lethbridge, St. Michael's	78	87	24	22	21,717	250
Medicine Hat, Municipal	52	59	13	12	13,374	227
Vegreville, St. Joseph's	39	40	9	12	11,322	283
Totals	1,526	1,569	431	453	375,618	239

*Including Mental Hospital Affiliates

7. Hospitalization Experience

This section of the annual report presents statistical data on hospitalization experience in 1958, with comparative figures for previous years whenever available.

Although the freedom of choice of hospital has been given to the individual, there are factors in regard to distance, availability of beds, and availability of the patient's choice of doctor which, to a degree, limit the extent to which the individual is able to take advantage of the free choice of hospital. The coinsurance payment per patient day required of eligible patients (see page 5) and the requirement that a patient be in need of active treatment care to be hospitalized tend to control the length of stay of the patient.

Utilization of Hospital Beds

Bed capacity of Alberta hospitals as at December 31st, 1958, had increased in relation to population growth and the increase in hospital cases and hospital days. Table 14 shows rated bed capacity, bed complement per 1,000 of population and the ratio of patients admitted per year to rated capacity.

TABLE 14
ACTIVE TREATMENT BEDS PER 1,000 POPULATION AND PATIENTS PER BED
PER YEAR, 1949 - 1958
(Including Contract Hospitals)

Year	Rated Bed Capacity		Bed Complement		Patients Per Bed Per Year*		Based Occupancy on Rated Capacity
	Beds and Cribs	Total	Beds and Cribs	Total	Rated Capacity	Bed Complement	
1949	5.4	6.4	6.4	7.9	34.0	28.3	84.7
1950	5.6	6.6	6.7	7.9	32.6	27.2	80.8
1951	5.9	6.9	6.6	7.8	30.9	27.3	77.9
1952	5.9	7.0	6.3	7.6	32.3	30.2	80.3
1953	6.3	7.4	6.8	8.0	31.2	29.2	74.4
1954	6.3	7.4	6.7	7.9	31.6	30.0	76.4
1955	6.4	7.7	6.7	8.0	31.3	30.0	75.4
1956	6.2	7.4	6.3	7.5	31.9	31.2	75.3
1957	6.1	7.3	6.3	7.5	33.0	32.1	77.5
1958	6.3	7.5	6.5	7.7	32.9	31.8	77.7

*Excluding newborn and bassinets.

In Alberta, as at December 31st, 1958, there were 6.3 rated beds and cribs (or 6.5 beds set up at December 31st) for every 1,000 people. If 911 beds for Federal Hospitals are included, the ratio of the beds per 1,000 of population is 7.0.

Volume of Hospital Care

There were 245,253 adult and children patients hospitalized in the approved active treatment hospitals of Alberta in 1958, including patients hospitalized in Contract Hospitals. These patients spent 2,087,385 days in hospital, an average of 8.5 days per patient, the same as in the previous year. Compared with 1957, there were 11,835 (5.1%) more patients under care and 98,488 (5.0%) more patient days in 1958, whereas population increase was estimated at 30,000 (2.6%).

The number of live births in the active treatment hospitals of Alberta was 35,619 in 1958, an increase of 1,247 (3.6%) over the total live births in 1957. Stillbirths numbered 378 in 1958, compared to 389 in 1957. The number of newborns in hospitals in 1958 was 36,247, and they received 264,539 days of care. This is 1,282 (3.7%) more newborn patients and 3,581 (1.4%) more newborn days than in 1957. After 30 days of hospitalization a newborn is considered a child and is "discharged" as a newborn and "readmitted" as a child.

Table 15 shows the increases in the volume of hospital care for the past ten years, 1949-1958, in relation to population increases.

TABLE 15
INCREASES IN ADULT AND CHILDREN CASES AND DAYS IN RELATION TO
POPULATION, 1949 - 1958
(Including Contract Hospitals)

Year	Percentage Yearly Increase			As Percent of 1949		
	Population	Cases	Days	Population	Cases	Days
1949	3.0	7.7	2.0	100.0	100.0	100.0
1950	2.8	2.4	2.2	102.8	102.4	102.2
1951	5.0	6.0	6.1	107.9	107.2	108.5
1952	3.2	9.1	3.6	111.4	117.0	112.3
1953	3.3	6.9	7.3	115.0	125.0	120.5
1954	3.7	4.1	5.4	119.3	130.2	127.1
1955	2.6	3.6	3.3	122.4	134.9	131.2
1956	5.4	3.2	1.8	128.9	139.3	133.6
1957	3.3	5.4	3.6	133.2	146.8	138.4
1958	2.6	5.1	5.0	136.6	154.2	145.3

During the past ten years, the yearly increase in the population of Alberta averaged 3.7%, while the yearly increase in hospital cases and patient days averaged 5.4% and 4.5% respectively during the same period. In 1958, the increases in population and hospital cases were below the ten-year average, while the increase in patient days was above it.

Table 16 shows hospitalization rates per 1,000 population for the years 1949-1958.

TABLE 16
HOSPITALIZATION CASES, ADMISSIONS, SEPARATIONS AND THEIR RELATED
DAYS OF CARE PER 1,000 POPULATION, 1949 - 1958
(Excluding Newborn, Including Contract Hospitals)

Year	Census or inter-censal Estimate of Alberta Population	Cases Per 1,000 Population			Days Per 1,000 Population		In Hospital Daily Per 1,000 Population
		Admissions	Patients Under Care	Separations	For Separated Cases	Days of Care During Year	
1949	871,000	179	183	179	1642	1650	4.52
1950	895,000	178	182	178	1623	1640	4.49
1951	939,501*	178	181	177	1634	1659	4.54
1952	970,000	188	192	188	1707	1664	4.56
1953	1,002,000	194	198	194	1712	1728	4.73
1954	1,039,000	195	199	195	1743	1757	4.81
1955	1,066,000	197	201	197	1753	1769	4.85
1956	1,123,116*	193	197	193	1714	1709	4.68
1957	1,160,000	197	201	197	1711	1715	4.70
1958	1,190,000	202	206	202	1742	1754	4.81

*Federal census of Alberta. The inter-censal estimates are by the Dominion Bureau of Statistics.

Length of Stay

Of the 238,127 patients discharged or deceased in 1958, a little less than four-fifths (79.8%) spent 10 days or less in the approved hospitals of Alberta, but they only absorbed 44.0% of the discharged days. Comparable figures for 1957 are 80.6% and 45.2%.

As is shown in Table 17 and Diagram II, the greater part of the patients (96.4%) were discharged or died within 29 days of admission to hospital. Long stay cases, patients who were hospitalized for 60 days or more, amounted to less than one per cent but absorbed 12.5% of the days.

TABLE 17
PERCENTAGE DISTRIBUTION OF SEPARATED ADULT AND CHILDREN PATIENTS
AND THEIR RELATED LENGTH OF STAY BY SEX, 1958
(Excluding D.V.A. Division, University Hospital, Including Contract Hospitals)

Length of Stay in Days	CASES			DAYS		
	Total	Male	Female	Total	Male	Female
1	8.4	4.0	4.4	1.0	.5	.5
2	12.4	5.7	6.7	2.9	1.3	1.6
3	9.9	4.3	5.6	3.4	1.4	2.0
4	8.6	3.6	5.0	4.0	1.7	2.3
5	8.7	3.1	5.6	5.0	1.8	3.2
6	8.7	2.6	6.2	6.1	1.8	4.3
7	8.7	2.4	6.2	7.0	2.0	5.0
8	6.4	2.0	4.4	5.9	1.8	4.1
9	4.5	1.6	2.9	4.7	1.7	3.0
10	3.5	1.4	2.1	4.0	1.6	2.4
11-14	8.1	3.5	4.6	11.6	5.0	6.6
15-19	4.7	2.3	2.4	9.2	4.4	4.7
20-29	3.8	2.0	1.8	10.5	5.5	5.0
30-59	2.7	1.5	1.2	12.2	6.6	5.6
60-89	.5	.3	.2	4.1	2.4	1.8
90 and over	.4	.2	.2	8.4	4.9	3.5
Total	100.0	40.5	59.5	100.0	44.5	55.5

In 1958 the average length of stay for adults and children patients has dropped to 8.6 days from 8.7 days in 1957. For newborns, the average length of stay continued its steady decline from 9.1 in 1949 to 7.4 in 1958.

Table 18 shows the average length of stay of separated patients by type of benefit for the years 1951-1958.

TABLE 18
AVERAGE LENGTH OF STAY IN DAYS OF SEPARATED PATIENTS IN APPROVED
HOSPITALS BY TYPE OF BENEFIT, 1951-1958

Type of Benefit	1951	1952	1953	1954	1955	1956	1957	1958
General	7.6	7.6	7.6	7.9	7.9	7.9	7.9	7.9
Maternity								
Hospitalization	8.4	8.2	7.9	7.8	7.6	7.5	7.3	7.6
Old Age Benefits	16.2	15.9	16.2	15.7	16.4	15.4	14.9	15.8
Mothers' Allowance	7.5	6.9	7.6	7.0	7.1	6.9	7.0	7.4
Blind Pension	14.8	13.5	14.4	15.8	14.8	17.1	15.9	13.9
Widows' Allowance	*	10.5	12.2	11.9	11.4	12.5	14.2	13.0
Disability Pension	*	*	*	*	*	*	*	14.2
Indians	*	*	11.7	10.8	13.4	10.6	9.1	7.9
Ex-Defence & D.V.A.**	*	*	*	*	*	*	*	12.5
W.C.B.	*	*	*	*	*	*	*	11.0
Not Covered	8.0	7.8	7.6	8.0	7.7	7.9	7.7	9.8
Average for all Patients	9.0	9.0	8.8	8.9	8.9	8.9	8.7	8.6

*Benefit not in effect in that year.

**For Federal D.V.A. Hospitals see Table 45.

Monthly Movement of Patients

Some fluctuation in the monthly admissions to hospitals during the year is noticeable in Alberta. In an average day in August, 1958, there were 5,321 patients under care in Alberta approved hospitals and in November, 1958, the comparable figure rose to 5,970 patients, a difference of 649 patients (see Table 36).

A study of the monthly hospital experience by size of hospital indicated no marked shift in the volume of hospital care from small-sized hospitals to large-sized hospitals since the inception of the new Plan on April 1st, 1958. Some shift in the volume of hospital care from rural (small hospitals) to urban centres (large hospitals) is to be expected because population growth is greater in the cities and in certain rural areas it is even declining.

Table 36 shows the monthly movement of adult and children patients and their related days in Alberta Approved Hospitals in 1958. Table 37 shows the monthly movement of newborn patients and their related days of hospital care during the same year. Diagram VI presents a graphic comparison of monthly admissions of adult and children patients in 1958 with 1957 and 1956.

Cases and Days by Age and Sex

More than one-third (35.1%) of the patients were between the ages of 20 and 39 and they utilized 28.2% of the bed capacity of the provincial approved hospitals. About three-quarters of these patients were females. This was mainly due to the fact that most maternity cases fall in that age group, and about 98% of them went to approved hospitals for care in 1958.

Table 19 shows the percentage distribution of separated cases and their related days by age group and sex. Diagram IV represents the same facts in graphic form.

TABLE 19
PERCENTAGE DISTRIBUTION OF SEPARATED ADULT AND CHILDREN CASES AND
PATIENT DAYS BY AGE GROUP AND SEX, 1958
(Excluding DVA Division, University Hospital, Including Contract Hospitals)

AGE GROUP IN YEARS	CASES			DAYS		
	Total	Male	Female	Total	Male	Female
Less than 1	3.9	2.3	1.6	3.8	2.2	1.6
1-4	7.7	4.4	3.3	5.2	3.1	2.1
5-9	7.2	3.9	3.3	4.5	2.5	2.0
10-19	10.5	4.3	6.2	8.0	3.5	4.5
20-29	20.3	4.2	16.1	15.7	3.7	12.0
30-39	14.8	3.9	10.9	12.5	3.6	9.0
40-44	5.0	1.9	3.1	4.8	1.9	2.9
45-49	4.5	1.9	2.6	4.7	2.1	2.6
50-54	4.3	2.0	2.3	4.9	2.4	2.5
55-59	3.8	1.9	1.9	4.9	2.5	2.4
60-64	3.6	1.8	1.8	5.3	2.7	2.6
65-69	4.0	2.2	1.8	6.3	3.5	2.8
70-74	4.1	2.3	1.8	7.1	4.0	3.1
75 and over	6.1	3.4	2.7	12.1	6.8	5.3
No Answer .....	.2	.1	.1	.2	.1	.1
Total	100.0	40.5	59.5	100.0	44.5	55.5

A comparison of the utilization of hospital services by age group in 1958 to that of 1957 reveals that the proportion of patients between the ages of 0-19 has increased from 18.5% in 1957 to 18.8% in 1958, while the utilization of hospital services by this age group dropped from 13.9% in 1957 to 13.5% in 1958. For patients 70 years of age or over, the proportion of their cases increased from 10.0% to 10.2% and their hospital days also increased from 18.0% to 19.2%.

In 1958 more than a quarter (25.5%) of the hospital facilities in Alberta approved hospitals was utilized by patients 65 years of age or over.

Table 20 shows that the average length of stay of patients under 40 years of age decreased in every age breakdown while the average stay of patients 45 years of age or over increased in every age breakdown.

TABLE 20
AVERAGE LENGTH OF STAY OF SEPARATED ADULTS AND CHILDREN PATIENTS
BY AGE GROUP, 1951-1958
(Excluding DVA Division, University Hospital. Including Contract Hospitals)

AGE GROUP	1951*	1952*	1953	1954	1955	1956	1957	1958
Less than 1	.....	.....	.....	.....	.....	.....	8.5	8.4
1-4	6.2	6.2	7.1	7.4	7.0	7.2	6.1	5.9
5-9	5.4	5.5	6.1	6.0	5.9	5.6	5.6	5.4
10-19	6.7	6.5	7.2	6.9	6.8	6.9	6.6	6.5
20-29	7.0	6.8	7.0	7.0	6.9	6.9	6.7	6.6
30-39	7.7	7.4	7.4	7.5	7.4	7.4	7.4	7.3
40-44	8.5	8.5	8.3	8.1	8.3	8.1	8.3	8.3
45-49	9.7	9.0	8.9	9.1	9.1	9.1	9.0	9.0
50-54	10.7	10.0	9.7	10.1	10.0	9.9	9.5	9.9
55-59	11.0	10.9	11.1	11.3	11.0	11.0	10.9	11.0
60-64	12.9	12.8	12.5	12.5	11.9	12.2	11.8	12.6
65-69	13.7	13.4	13.5	13.5	13.3	13.2	13.2	13.6
70-74	15.3	14.7	15.3	15.1	15.1	14.8	13.9	14.8
75 and over	17.1	16.4	16.8	16.5	17.8	17.1	16.4	17.1
No Answer	7.9	5.6	7.6	9.5	7.5	11.1	8.9	10.4

*Does not include Polio patients.

Care of Social Service Recipients

Table 21 shows hospital care in approved hospitals of Social Service Recipients together with rates for separated cases and days and the average length of stay for each category.

TABLE 21
HOSPITAL CARE OF SOCIAL SERVICE RECIPIENTS, 1958

	Total	Old Age	Mothers' Allowance	Blind Pension	Widows' Allowance	Disability Pension
Average Eligible:						
Number	40,380	29,654	6,464	698	806	2,758
% of Total	100.0	73.4	16.0	1.7	2.0	6.8
Separated Patients:						
Number	19,273	16,033	1,219	389	276	1,356
% of Total	100.0	83.2	6.3	2.0	1.4	7.0
Per 100 Eligible	47.7	54.1	18.9	55.7	34.2	49.2
Days for Separated Patients:						
Number	290,508	253,165	9,048	5,416	3,578	19,301
% of Total	100.0	87.1	3.1	1.9	1.2	6.6
Per 100 Eligible	719.4	853.7	140.0	775.9	443.9	699.8
Average Stay	15.1	15.8	7.4	13.9	13.0	14.2

There were 19,273 social service recipients separated from hospitals in 1958. They had stayed in hospital for a total of 290,508 days, for an average of 15.1 days each. The average number of social service recipients eligible for hospitalization increased by 3,760 (10.3%) in 1958 over 1957 while the number hospitalized increased by 1,891 (10.9%). Old Age and Mothers' Allowance groups have stayed longer in hospital in 1958 than they did in 1957 and 1956. The average length of stay of Blind Pensioners was less in 1958 than in any other year since 1952, whereas Widows' Allowance group levelled off in 1958 after a sharp increase in their average length of stay in 1957.

8. Construction and Location of Hospitals

The construction grants for approved construction are shown in Table 22. These grants are made on basis of the net increase in beds resulting from the construction project and the amount.

TABLE 22
CONSTRUCTION GRANTS FOR APPROVED CONSTRUCTION
(Per bed or bed equivalent)

	Federal	Provincial	Total
Acute hospital beds	\$1,000	\$1,000	\$2,000
Chronic hospital beds including Mental and T.B.	\$1,500	\$1,500	\$3,000
Nurses' residence at a hospital not having a training school	\$ 500	\$ 500	\$1,000
Nurses' residence at a hospital with a Nurses' Training School	\$ 750	\$1,250	\$2,000

The hospital additions completed during the calendar year 1958 are shown in Table 23.

TABLE 23
NEW HOSPITAL CONSTRUCTION AND COMPLETED INCREASES IN BEDS AND
BASSINET CAPACITY, 1958
(Excluding Mental and T.B. Beds)

	Beds	Bassinets
Banff Mineral Springs*	46	11
Calgary General	81	...
Cold Lake John Neil*	27	8
Drayton Valley Municipal**	20	8
Edmonton Royal Alexandra	12	...
Macleod Municipal*	32	11
Total	216	38

*New Structure
**New Hospital

During the 1958-1959 fiscal year a total of \$423,094.16 (excluding the federal share) was expended by the Province on construction grants for the above and other construction projects which were underway in 1958 but were not completed by the end of the year. The comparable figure for 1957-1958 was \$672,919.34.

III. FINANCIAL INFORMATION ON APPROVED HOSPITALS

The statistical data presented in this section of the annual report have been collected from auditor's 1958 Financial Statement submitted by each approved hospital. Contract and Federal

Hospitals are excluded throughout this section. 1955 represents the first year that standardized accounting procedures were effective through most of the approved hospitals, hence comparisons with years prior to that date are somewhat arbitrary.

1. *Expenditure*

The total cost of operating the 101 approved hospitals reporting in 1958 amounted to \$32,624,653 excluding depreciation and capital interest or \$35,475,327 including depreciation and capital interest (see Table 38). Both these figures exclude perquisites. Compared to 1957 net expenditures have increased by \$3,058,164 (10.3%) and gross expenditure by \$3,275,658 (10.2%).

Hospital expenditures per capita of Alberta population amounted to \$27.4 (or \$29.8 gross expenditure) in 1958. Expenditure per hospital rated bed capacity (including $\frac{1}{3}$ bassinets) averaged \$4,119 (or \$4,479 gross expenditure) for the same year.

Table 24 shows the percentage increase since 1949 in salaries and wages, total net expenditure and total gross expenditure of Alberta approved hospitals in relation to net revenue and population.

TABLE 24

INCREASES IN SALARIES AND WAGES, NET EXPENDITURES, GROSS EXPENDITURE AND NET REVENUE IN RELATION TO POPULATION 1949-1958 (1949=100)

YEAR	Population	EXPENDITURES			Net Revenue
		Salaries and Wages	Net Total	Gross Total	
1949	100.0	100.0	100.0	100.0	100.0
1950	102.8	111.7	109.2	110.0	107.8
1951	107.9	129.4	124.1	124.9	118.1
1952	111.4	156.1	141.2	142.5	139.5
1953	115.0	197.5	170.2	173.7	172.8
1954	119.3	238.1	195.0	199.2	193.4
1955	122.4	259.0	212.4	216.2	191.4
1956	128.9	293.5	230.4	237.9	212.8
1957	133.2	344.0	262.1	267.6	233.4
1958	136.6	386.5	288.7	294.2	268.8

Compared with 1957, non-salary expenditures have increased as follows:

Expenditures on professional care of patients, medical and surgical supplies, and drugs and medicines increased by \$317,712 (8.0%); general services, excluding perquisites, increased by \$110,657 (3.8%); general administration \$103,300 (9.4%); and Physical Plant \$27,892 (1.7%). Expenditure on miscellaneous items dropped by \$10,212 (8.2%).

Increases in the cost of salaries and wages in 1958 have added 70 cents to the average cost per patient day cost and accounted for 80.1% of the increases in the total cost of operating Alberta approved hospitals.

Table 25 gives revenue and expenditure per patient day for the years 1956-1958. In 1956 and 1957, a number of hospitals

did not segregate expenditures on medical supplies and on drugs and medicines, but included them with expenditures on professional care of patients. This accounts for the apparent decrease in the professional care of patients per patient day cost shown in Table 25.

TABLE 25
EXPENDITURES PER PATIENT DAY, 1956-1958
(Including $\frac{1}{3}$ Newborn Days)

	1956	1957	1958	By Size of Hospital, 1958			
				1-29	30-89	90-179	180 and over
Salaries and Wages	8.47	9.59	10.29	8.45	7.54	11.05	11.74
Medical Supplies .....	.36	.41	.64	.47	.37	.46	.80
Drugs and Medicine .....	.42	.48	.69	.64	.61	.64	.74
Direct Expenditure:							
General Administration .....	.50	.53	.55	.61	.46	.56	.59
Prof. Care of Patients .....	.98	1.01	.64	.48	.52	.52	.73
General Services*	1.42	1.40	1.39	1.40	1.14	1.37	1.49
Physical Plant .....	.80	.79	.77	1.19	.93	.80	.62
Other .....	.04	.06	.05	.07	.03	.02	.06
Total Net Expenditure	12.98	14.27	15.02	13.31	11.60	15.42	16.77
Depreciation .....	.81	.80	.82	1.14	1.13	.76	.64
Interest** .....	.50	.47	.49	.38	.44	.22	.56
Total Gross Expenditure	14.30	15.54	16.33	14.83	13.18	16.41	17.96

*Excluding Perquisites included in Salaries and Wages.

**On long term loans only. Interest on current loans included with Other.

2. Revenue

Net revenue of Alberta approved hospitals showed a continuous increase in 1958, amounting to \$33,398,331 which is \$4,398,353 (15.2%) more than 1957. Net revenue per patient day (including $\frac{1}{3}$ newborn days) rose to \$15.38 in 1958. The comparable figures for 1956 and 1957 were \$13.18 and \$13.74 respectively. In 1958, net revenue per patient day exceeded net expenditure per patient day by 36 cents, but fell short of gross expenditure per patient day by 95 cents.

Tables 41 and 42 show the revenue of Alberta approved hospitals from general services to in-patients, from special services, and other income during 1958.

3. Value and Depreciation of Plant Assets

The net book value, after depreciation, of the plant assets of the approved hospitals, excluding Devon Hospital and Calgary General Hospital, amounted to \$54,050,409, of which \$46,560,065 was the net book value of buildings, improvements and permanent fixtures at cost, and \$7,490,344 was the net book value of furniture and equipment at cost.

Analysis of value and depreciation of building, improvements and permanent fixtures at cost, and analysis of value and depreciation of furniture and equipment at cost are given in Tables 43 and 44 respectively.

DIAGRAM I

**INCREASES IN PATIENTS, DAYS, RATED BED CAPACITY
AND STAFF OF ALBERTA APPROVED HOSPITALS IN
RELATION TO ALBERTA POPULATION, 1949 - 1958
(1949 = 100)**

(EXCLUDING NEWBORN AND BASSINETS)

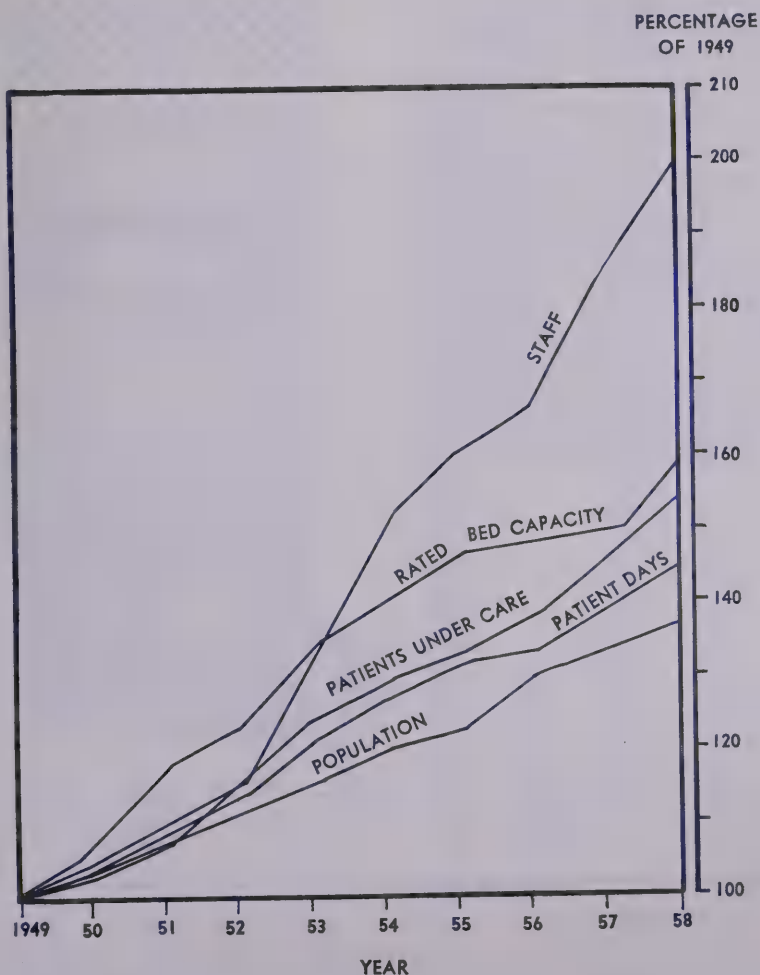


DIAGRAM II

PERCENTAGE DISTRIBUTION OF SEPARATED CASES AND PATIENT DAYS BY LENGTH OF STAY, 1958

(EXCLUDING D.V.A. DIVISION OF THE UNIVERSITY HOSPITAL, AND NEWBORN)

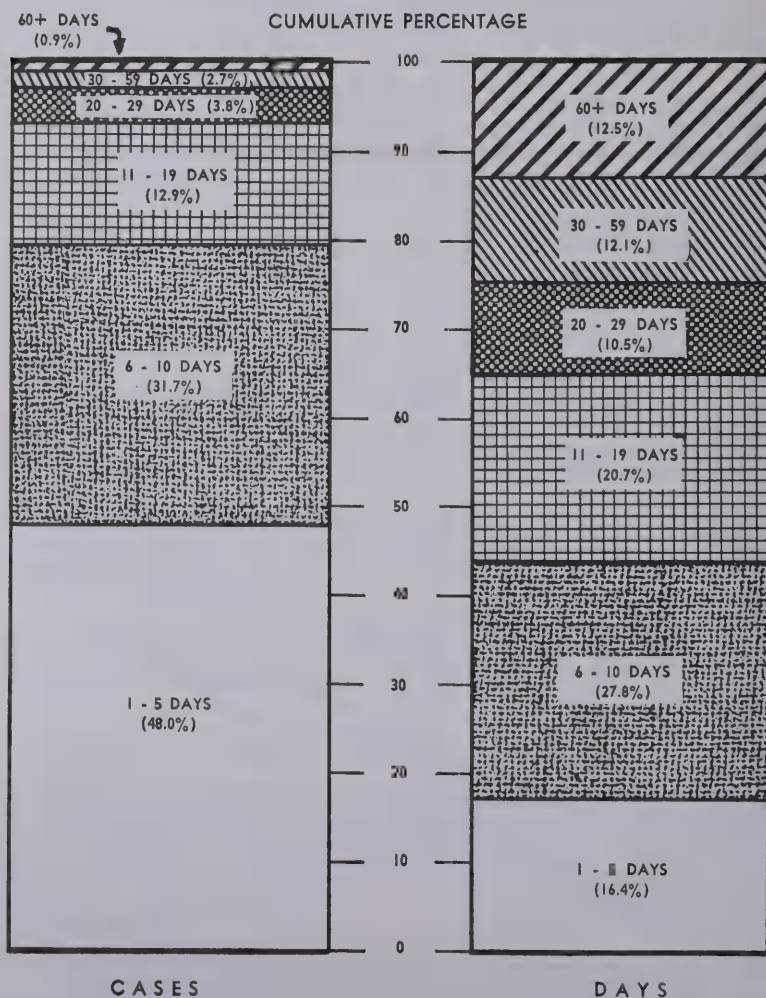


DIAGRAM III

AVERAGE LENGTH OF STAY IN DAYS OF SELECTED TYPES OF HOSPITAL BENEFICIARIES, 1955 - 1958

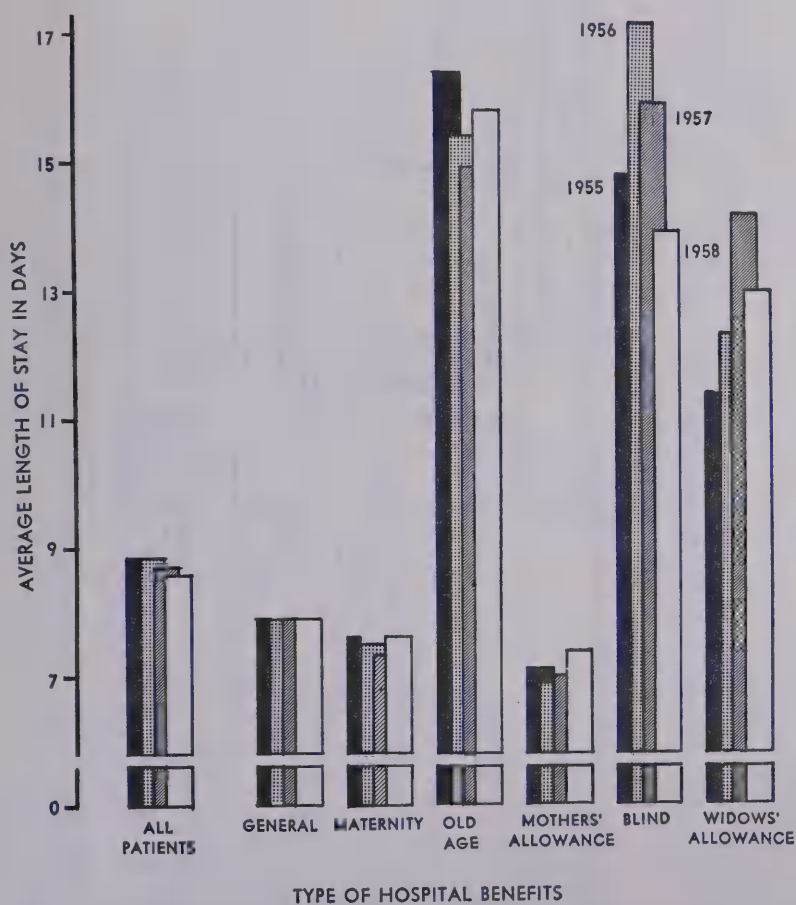


DIAGRAM IV

PERCENTAGE DISTRIBUTION OF SEPARATED CASES AND PATIENT DAYS BY AGE GROUP, 1958

(EXCLUDING D.V.A. DIVISION OF THE UNIVERSITY HOSPITAL, AND NEWBORN)

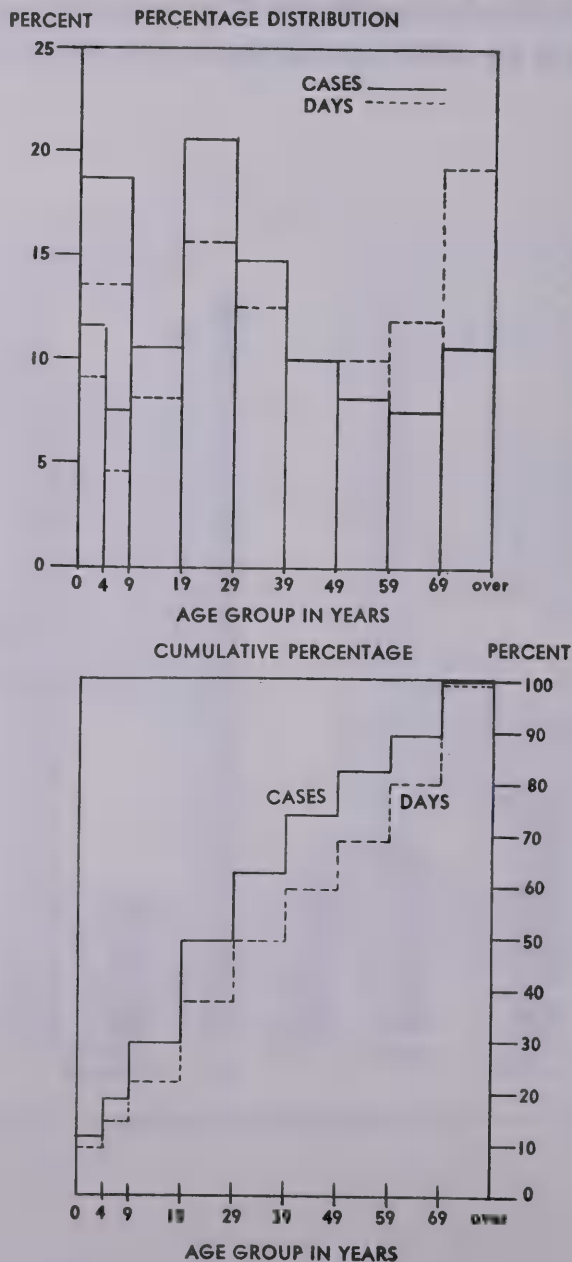


DIAGRAM V

AGE AND SEX DISTRIBUTION OF SEPARATED CASES AND PATIENT DAYS, 1958

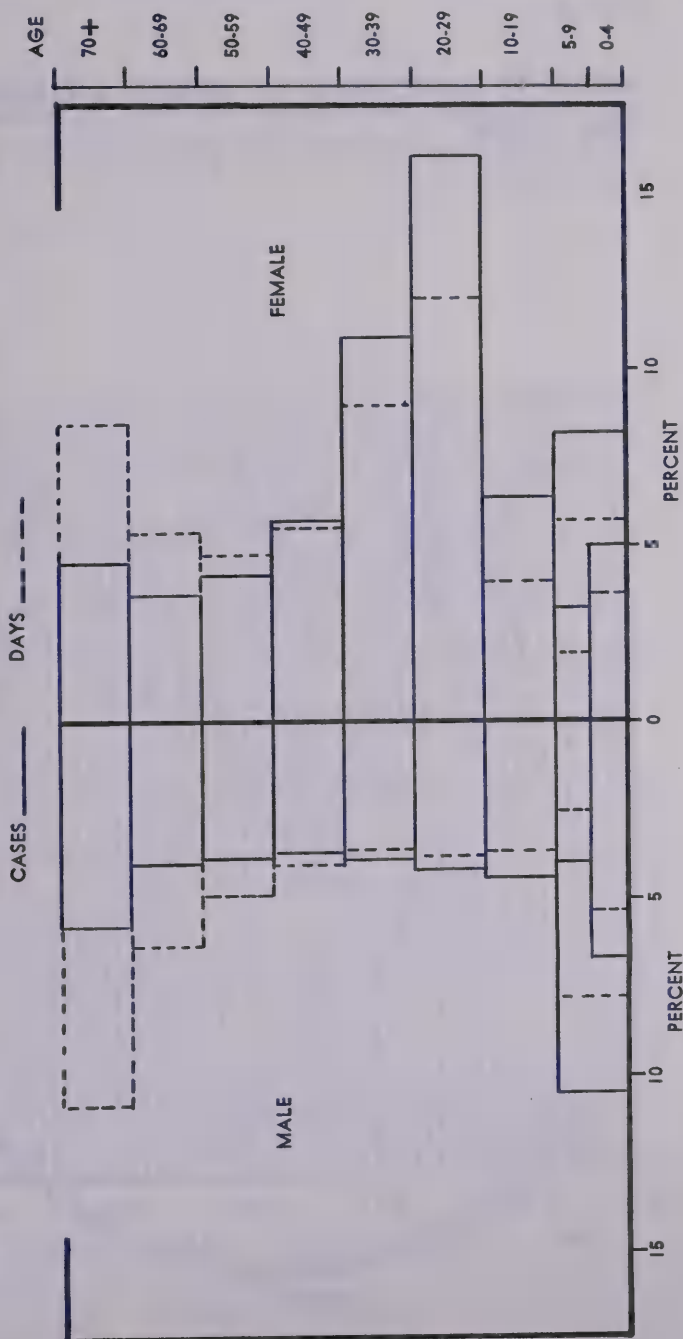


DIAGRAM VI

**MONTHLY ADMISSIONS OF ADULTS & CHILDREN
1956 - 1958**

(IN THOUSANDS)

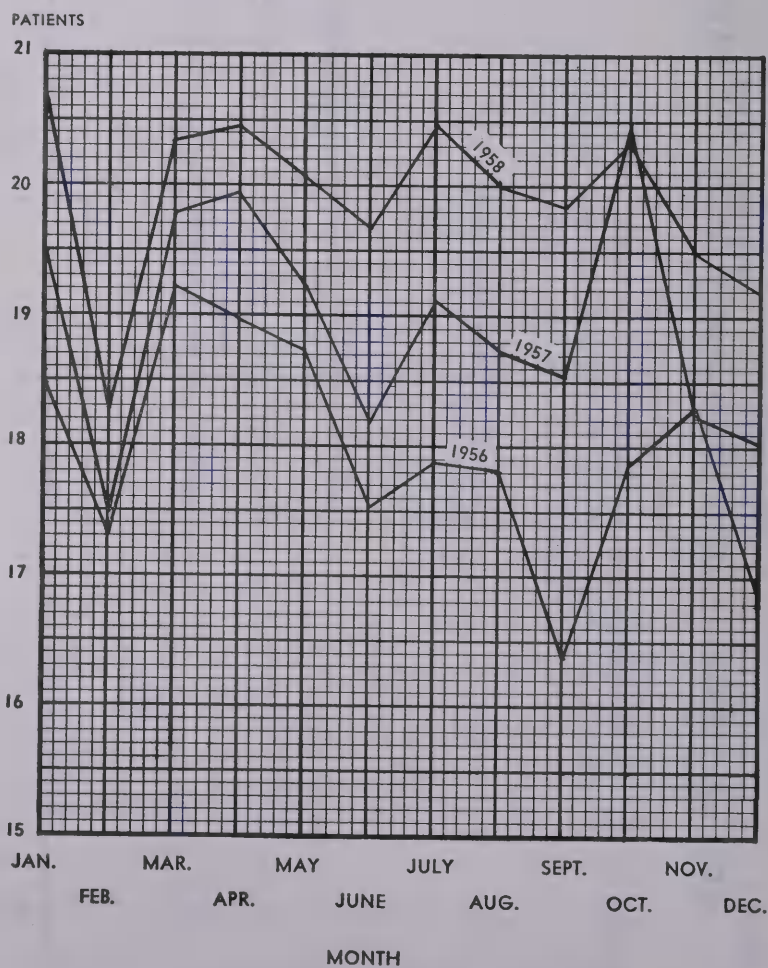
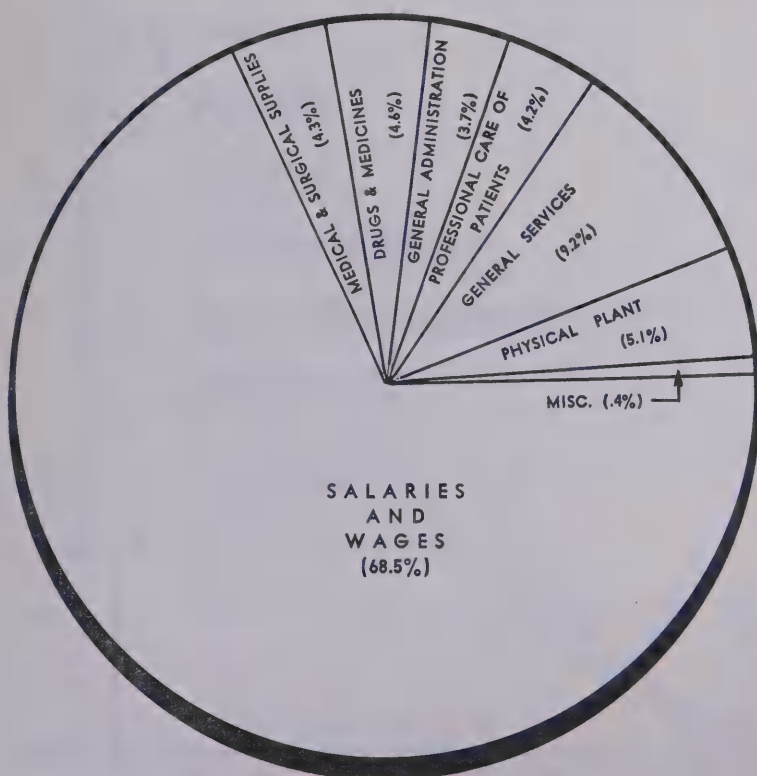


DIAGRAM VII

**DISTRIBUTION OF NET OPERATING EXPENDITURES
BY MAJOR TYPE OF EXPENDITURE, 1958**

NET EXPENDITURE \$32,624,653

DIAGRAM VIII

**INCREASES IN SALARIES AND WAGES, NET
EXPENDITURE, AND NET REVENUE, 1949 - 1958
(1949=100)**

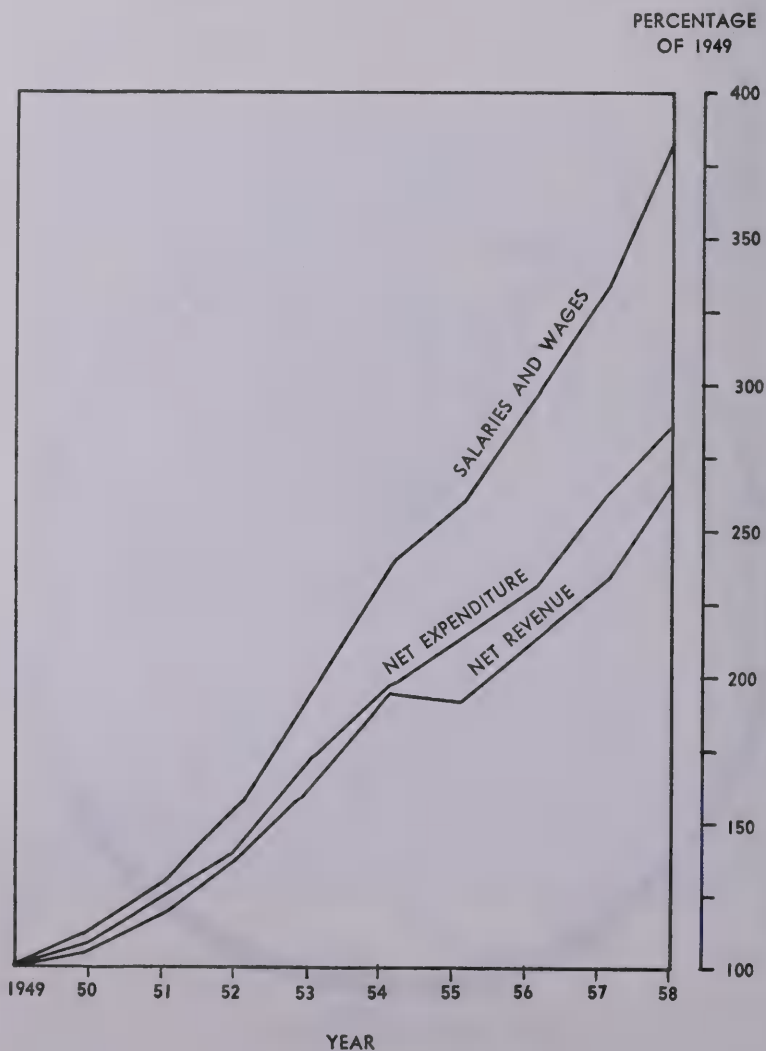
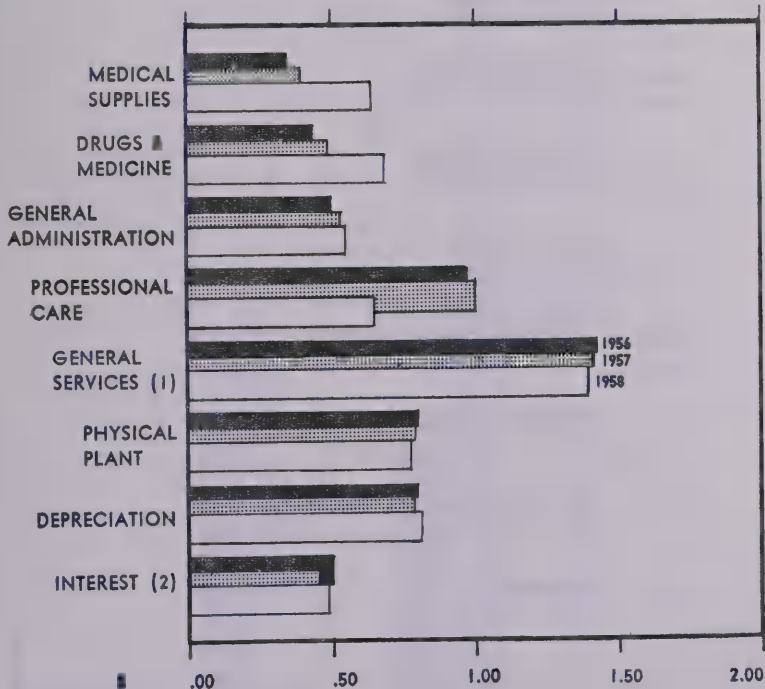


DIAGRAM IX

HOSPITAL COST PER PATIENT DAY, OF SELECTED EXPENSES, 1956 - 1958

(INCLUDING 1/2 NEWBORN DAYS)



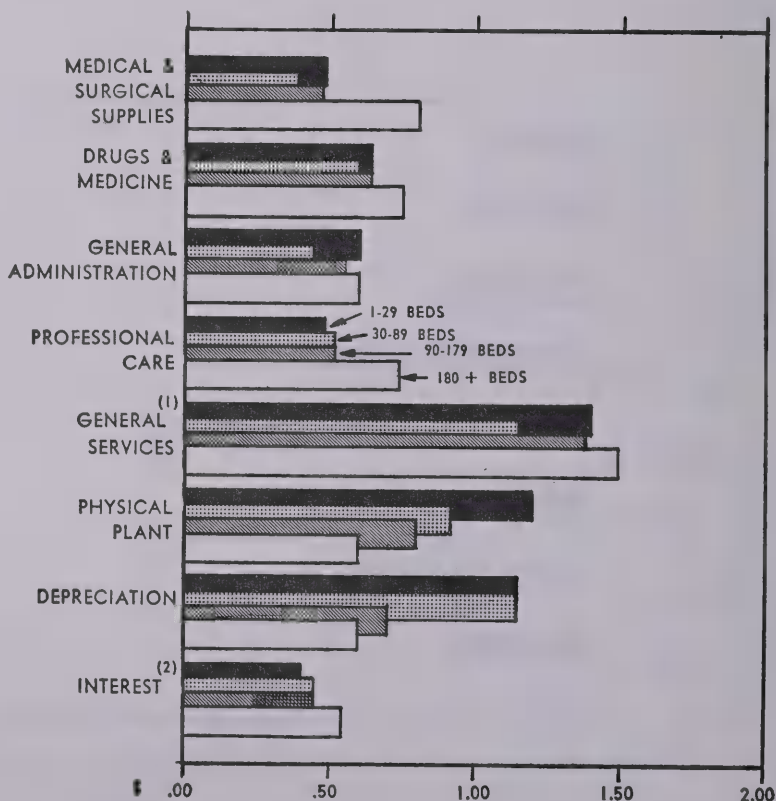
(1) EXCLUDING PERQUISITES

(2) ON LONG TERM LOANS ONLY

DIAGRAM X

HOSPITAL COST PER PATIENT DAY, OF SELECTED EXPENSES, BY SIZE OF HOSPITAL, 1958

(INCLUDING $\frac{1}{3}$ NEWBORN DAYS)



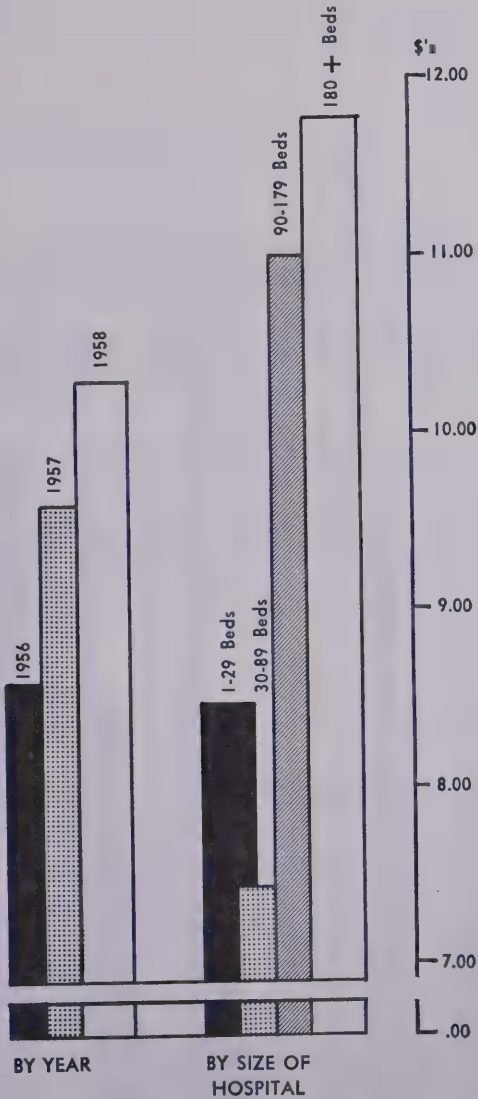
(1) EXCLUDING PERQUISITES

(2) ON LONG TERM LOANS ONLY

DIAGRAM XI

SALARIES AND WAGES⁽¹⁾ PER PATIENT DAY, 1956-1958 AND BY SIZE OF HOSPITAL, 1958

(INCLUDING $\frac{1}{3}$ NEWBORN DAYS)



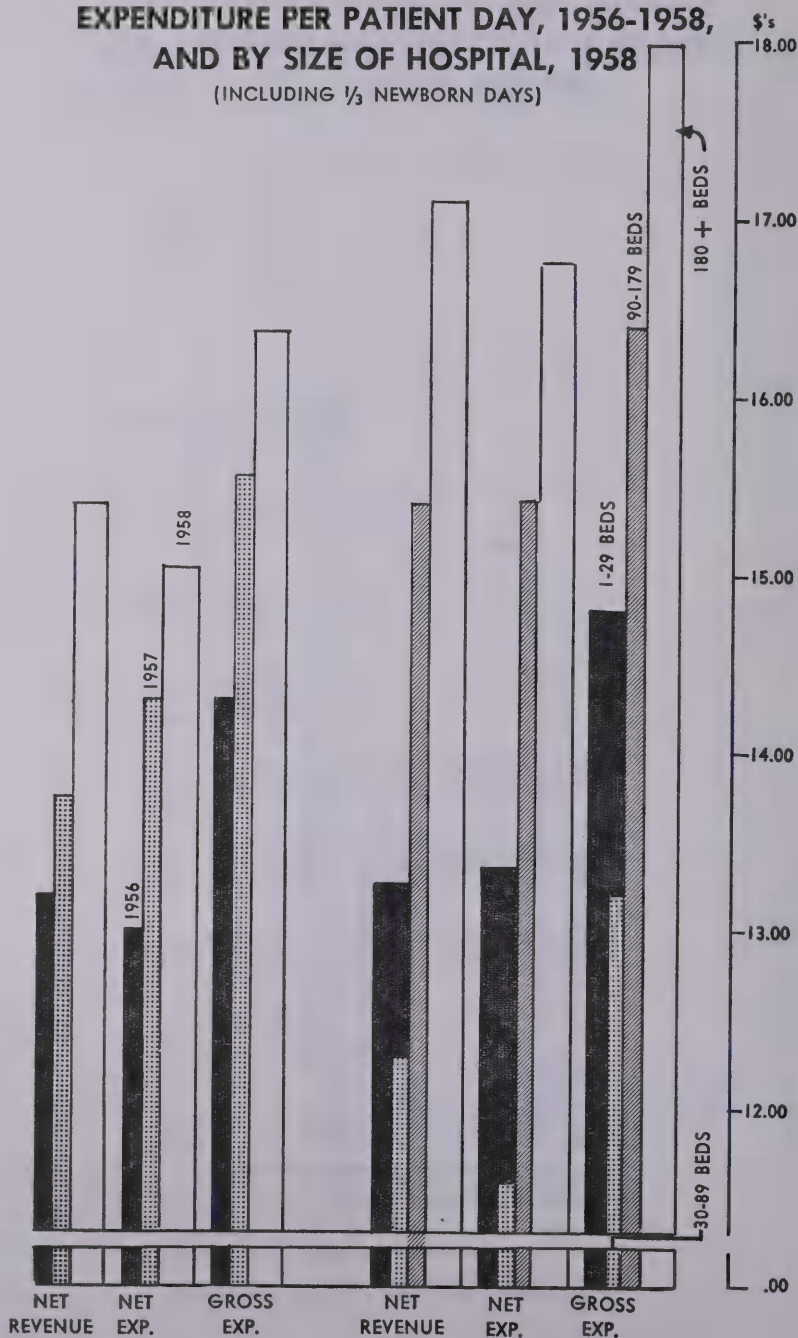
(1) SALARIES AND WAGES INCLUDE PERQUISITES

DIAGRAM XII

NET REVENUE, NET EXPENDITURE, AND GROSS EXPENDITURE PER PATIENT DAY, 1956-1958,

AND BY SIZE OF HOSPITAL, 1958

(INCLUDING $\frac{1}{3}$ NEWBORN DAYS)



30 - 89 BEDS											
Alhambra	1,102	1,754	2,856	1,061	5,630.60	67,975.00	177.02	121.80	73,904.42	14,573.15	88,477.57
Barrhead	1,529	4,487	1,026	500	2,132.00	79,440.00	13.50	1,476.80	93,248.90	6,988.00	90,536.80
Barrhead	1,224	3,645	4,869	1,175	8,965.40	82,889.00		1,422.00	82,589.90	23,627.05	116,916.95
Baltimore	559	1,950	2,526	553	4,594.60	94,279.00			98,873.60	12,214.00	111,087.60
Bonnyville St. Louis	733	1,680	2,413	643	4,503.80	68,774.00		1,104.40	75,082.20	13,583.00	87,985.20
Brooks	1,257	1,048	3,316	1,168	4,873.60	125,751.00			130,624.60	15,451.65	146,076.25
Calgary Grace	3,074		2,074	3,407	8,018.00	41,844.00		333.50	50,195.50	13,778.40	63,973.90
Clareholm	687	906	1,607	640	3,211.20	80,308.00		98.40	83,617.60	10,628.50	94,246.10
Didsbury	809	714	1,523	715	3,151.80	98,617.00	155.17	95.85	102,019.82	10,104.85	112,124.67
Edson	1,359	871	2,230	1,263	7,442.80	47,332.00	204.70	278.60	52,646.30	9,967.10	62,613.40
Elk Point	916	3,065	3,998	846	7,242.80	106,822.00	237.80	894.40	115,197.00	15,365.25	130,562.25
Fairview	936	1,222	2,158	928	4,380.80	71,580.00		133.50	76,094.30	12,073.90	88,168.20
Fort Macleod	627	655	1,305	597	2,607.60	55,869.00		227.40	58,704.00	63,925.15	88,168.20
Fort Vermilion	483	532	1,015	439	2,063.00	24,845.00		2,222.95	29,130.95	15,396.80	44,527.75
Galahad	468	859	1,327	441	2,564.20	67,120.00	132.80	428.40	70,245.40	7,651.25	77,896.65
Grande Prairie	2,356	2,248	4,604	2,173	9,539.40	144,254.00	239.02		154,032.42	26,585.55	180,617.97
Hanna	1,203	2,107	3,317	1,143	6,450.20	112,670.00		76.05	119,196.25	15,125.05	134,321.30
High Prairie	1,406	1,146	2,552	1,235	5,315.20	90,276.00	1,021.29	470.75	94,668.24	14,382.30	111,467.54
High Prairie	1,228	1,196	2,445	1,107	5,019.00	111,216.00	118.17	476.85	116,830.02	12,697.20	129,527.22
Lacombe	1,535	1,403	2,938	1,431	6,131.80	113,342.00	54.96	11.05	119,509.81	17,913.10	137,422.91
Lac La Biche	1,048	2,792	3,840	988	7,132.00	93,068.00	310.35	1,033.60	101,543.95	19,369.80	120,913.75
Lloydminster	1,245	1,571	2,816	1,191	5,696.60	112,029.00		19.00	112,333.60	14,075.25	131,819.85
McLennan	1,332	2,209	3,541	1,262	6,927.60	110,836.00		955.20	119,039.47	22,453.35	141,552.82
Olds	985	1,473	2,470	907	4,859.60	83,642.00	300.67	434.40	89,032.05	12,556.90	101,588.95
Peace River	1,552	1,259	2,811	1,504	6,001.60	103,343.00	4.32	61.60	109,484.12	12,556.90	120,698.87
Pincher Creek	1,053	1,244	2,371	894	4,693.20	92,275.00	29.60	640.50	95,438.00	12,556.90	107,994.90
Ponoka	1,471	1,802	3,027	1,083	4,693.20	92,275.00		318.50	48,476.45	8,200.20	56,676.65
Rocky Mountain House	770	1,002	1,802	715	3,208.20	44,195.00	14.70	318.55	48,476.45	8,200.20	56,676.65
Stettin	730	2,892	3,722	715	6,670.20	89,159.00	198.99	368.90	96,397.09	19,789.55	116,186.64
St. Paul	1,473	1,966	3,439	1,312	6,814.40	131,730.00		76.50	138,620.90	17,539.15	156,160.05
Taber	1,822	1,908	3,744	1,743	7,733.40	96,727.00	81.70	671.40	102,642.90	16,141.85	121,355.35
Tofield	2,301	1,302	3,642	2,161	7,988.20	156,552.00		735.75	165,275.95	19,403.90	184,679.85
Two Hills	664	1,454	2,125	620	4,020.00	67,524.00		224.70	71,768.70	12,742.65	84,511.35
Trochu	277	385	662	270	1,329.20	37,550.00		1.45	38,886.65	4,246.75	43,133.40
Vegreville	452	2,214	2,666	429	4,694.60	56,806.00		112.50	61,613.10	10,722.95	72,336.05
Vermilion	1,098	3,956	5,061	1,045	9,142.60	150,737.00	188.42	22.05	160,090.07	30,516.35	190,606.42
Viking	802	735	1,537	776	5,154.80	73,592.00	93.65	8.25	78,855.10	14,674.40	93,525.10
Vulcan	689	390	1,083	664	2,396.80	62,528.00		55.50	75,797.15	8,928.70	84,725.85
Wainwright	1,325	1,577	2,926	1,083	5,931.60	95,929.00	251.19	9.90	64,934.70	6,619.40	71,554.10
Wetlock	1,715	4,097	5,812	1,602	10,901.20	193,282.00		880.15	102,991.94	13,639.60	116,631.54
Wetaskiwin	1,723	2,232	3,971	1,647	8,000.60	95,228.00	65.40	225.40	114,408.00	27,890.05	142,298.65
Total	47,443	67,143	114,884	45,061	228,490.60	3,696,140.00	4,156.12	17,813.50	3,936,901.22	605,091.60	4,551,691.82

TABLE 26—PROVINCIAL HOSPITALIZATION PAYMENTS TO APPROVED HOSPITALS, AND CO-INSURANCE DAYS, 1958 (Continued)

HOSPITAL	CO-INSURANCE DAYS						PAYMENTS							
	Maternity	Pensioners	Cancer	Arthritis	Polio	Total	Newborn	Co-Insurance	Cost Approved	Bad Debt	Capital	Total Amount	Total Under Old Plan	Total for Year 1958
90 - 179 BEDS														
Calgary Crippled Children's	2,456	66	7	3	5,056	5,132	2,352	9,237.60	273,628.00	.....	259.20	283,124.80	7,071.50	290,196.30
Calgary General	11,423	3,590	6	.....	.....	6,032	2,352	13,245.60	243,810.00	.....	1,440.45	258,496.05	33,295.40	291,791.45
Calgary St. Elizabeth's	1,717	2,335	.....	.....	.....	4,052	1,642	8,935.60	189,818.00	84.52	48.30	198,886.42	19,721.25	218,607.67
Drumheller	964	5,672	7	.....	.....	6,643	889	12,856.40	159,880.00	214.54	34.00	172,984.94	28,198.40	201,183.34
Lamont	4,177	2,921	47	.....	10	7,155	4,147	17,026.00	304,069.00	53.57	3,252.15	324,400.72	35,958.65	360,395.37
Red Deer														
Total	9,314	14,584	67	3	5,066	29,034	9,040	61,301.20	1,171,205.00	352.63	5,034.10	1,237,892.93	124,285.20	1,362,178.13
180 BEDS AND OVER														
Calgary General	20,262	16,585	1,617	141	1,259	39,864	20,574	100,302.00	2,327,287.00	4,902.52	22,390.10	2,454,861.62	238,991.25	2,693,852.87
Calgary Holy Cross	11,423	6,307	1,420	12	.....	19,152	11,376	49,680.00	1,053,386.00	1,778.81	8,907.20	1,113,752.01	121,234.25	1,234,986.26
Edmonton General	11,804	12,990	1,067	14	240	25,715	11,555	62,985.00	1,084,801.00	.....	12,400.90	1,160,194.90	154,557.75	1,314,699.65
Edmonton Misericordia	20,246	12,152	766	.....	.....	23,164	10,946	57,274.00	1,035,756.00	.....	6,280.15	1,099,310.15	162,142.50	1,261,452.65
Edmonton Royal Alexandra	28,576	20,259	1,529	41	154	50,559	28,725	129,843.00	1,949,835.00	1,886.70	16,127.50	2,097,692.20	276,960.25	2,374,652.45
Edmonton University	11,686	21,082	2,257	517	9,927	45,469	11,487	102,425.00	2,339,649.00	1,818.00	35,924.45	2,494,894.45	196,021.75	2,675,836.20
Lethbridge Municipal	5,481	4,930	818	.....	24	11,253	5,202	27,708.00	616,337.00	497.33	6,171.55	650,713.88	64,046.25	714,760.13
Lethbridge St. Michael's	3,082	5,140	238	17	.....	8,477	2,902	19,856.00	436,420.00	.....	2,478.00	458,754.00	60,046.85	518,800.85
Medicine Hat	4,330	5,647	111	.....	.....	10,088	4,195	24,371.00	516,993.00	266.87	331.20	541,962.07	47,335.75	589,297.82
Total	106,890	104,692	9,823	732	11,604	233,741	106,962	574,444.00	11,360,444.00	11,150.23	111,019.05	12,072,135.28	1,321,293.60	13,378,340.88
GRAND TOTAL	183,320	216,095	10,154	735	16,750	427,054	179,960	957,225.30	17,978,469.00	16,365.40	138,384.70	19,096,523.40	2,280,905.55	21,371,349.95

TABLE 27.—RATED BED CAPACITY AND BEDS SET UP IN HOSPITALS BY TYPE OF BED AT DECEMBER 31st, 1958

HOSPITAL	RATED BED CAPACITY						BEDS SET UP AT MIDNIGHT, DECEMBER 31, 1958											
	TYPE OF BED						TYPE OF BED											
	Total	Basinets	Medicine and Surgery	Obstetrics	Children's	Orthopedic	Psychiatry	Communicable Diseases	Other	Total	Basinets	Medicine and Surgery	Obstetrics	Children's	Orthopedic	Psychiatry	Communicable Diseases	Other
1 - 29 BEDS																		
Bassano	26	6	21	3	2	2	2	25	6	20	3	2	2	2	2	2	2	2
Beaverlodge	20	9	10	4	4	4	4	20	9	10	4	4	4	4	4	4	4	4
Bentley	16	7	7	4	3	3	3	16	7	7	4	3	3	3	3	3	3	3
Berwyn	21	5	14	4	3	3	3	21	5	14	4	3	3	3	3	3	3	3
Bonnyville K.H.P.	13	5	13	3	3	3	3	22	5	14	4	3	3	3	3	3	3	3
Cannore	12	4	10	2	4	4	4	12	4	10	2	4	4	4	4	4	4	4
Cardston	24	6	12	8	4	4	4	30	10	16	10	4	4	4	4	4	4	4
Carmangay	14	8	11	3	3	3	3	15	8	12	3	3	3	3	3	3	3	3
Castor	25	8	19	4	2	2	2	23	8	19	4	2	2	2	2	2	2	2
Cereal	9	3	4	2	3	3	3	16	4	11	3	3	3	3	3	3	3	3
Coaldale	13	5	10	3	3	3	3	16	4	11	3	3	3	3	3	3	3	3
Cold Lake	27	8	13	4	6	6	6	27	8	13	4	6	6	6	6	6	6	6
Consort	22	8	22	3	3	3	3	22	8	22	3	3	3	3	3	3	3	3
Coronation	18	3	10	4	3	3	3	18	3	10	4	3	3	3	3	3	3	3
Daysland	22	5	11	5	6	6	6	22	5	11	5	6	6	6	6	6	6	6
Devon	7	4	6	1	1	1	1	7	4	6	1	1	1	1	1	1	1	1
Drayton Valley	20	8	15	2	3	3	3	20	8	15	2	3	3	3	3	3	3	3
Eckville	29	5	17	5	4	4	4	31	9	18	4	4	4	4	4	4	4	4
Elmira	16	6	11	4	1	1	1	17	6	11	4	1	1	1	1	1	1	1
Empress	23	4	15	4	6	6	6	23	4	15	4	6	6	6	6	6	6	6
Fort McMurray	21	4	11	4	4	4	4	17	4	12	4	4	4	4	4	4	4	4
Glendon	21	7	14	2	5	5	5	27	7	17	3	3	3	3	3	3	3	3
Hardisty	20	6	15	...	...	...	...	10	4	8	...	...	...	...	...	...	...	...
Hythe	10	4	8	2	...	...	...	46	8	34	8	...	...	...	...	...	...	...
Innisfail	29	8	29	...	...	...	...	13	4	7	...	...	...	...	...	...	...	...
Islay	13	4	7	3	3	3	3	26	8	13	3	2	2	2	2	2	2	2
Jasper	26	8	13	11	6	6	6	27	8	16	6	6	6	6	6	6	6	6
Killam	27	6	16	6	5	5	5	27	6	16	6	5	5	5	5	5	5	5
Magrath	22	8	12	4	6	6	6	19	8	17	4	4	4	4	4	4	4	4
Manning	16	8	16	...	...	...	...	19	8	17	...	...	...	...	...	...	...	...
Mannville	15	4	8	4	3	3	3	22	5	12	7	7	7	7	7	7	7	7
Mayerthorpe	20	8	11	4	4	4	4	22	2	11	4	4	4	4	4	4	4	4
Mercoal	6	...	4	...	...	...	...	6	...	4	...	...	...	...	...	...	...	...
Mundare	26	4	18	4	4	4	4	26	4	18	4	4	4	4	4	4	4	4
Myram	20	8	12	2	4	4	4	20	8	12	2	4	4	4	4	4	4	4
Oyen	17	5	11	3	3	3	3	23	5	15	3	3	3	3	3	3	3	3
Provost	26	6	17	4	3	3	3	31	6	21	4	4	4	4	4	4	4	4
Rayway	14	5	11	3	3	3	3	15	4	12	3	3	3	3	3	3	3	3
Raymond	18	5	12	3	5	5	5	18	5	12	3	5	5	5	5	5	5	5
Rimbey	19	8	10	4	4	4	4	25	6	18	4	4	4	4	4	4	4	4
Smoky Lake	15	5	10	4	1	1	1	20	10	11	5	5	5	5	5	5	5	5
Three Hills	25	10	15	6	4	4	4	19	10	11	4	4	4	4	4	4	4	4
Turner Valley	22	6	15	4	3	3	3	23	6	16	4	4	4	4	4	4	4	4
Vilna	14	3	6	4	4	4	4	18	3	10	4	4	4	4	4	4	4	4
Willingdon	13	3	7	4	2	2	2	21	4	13	4	4	4	4	4	4	4	4
Totals	839	253	553	151	121	...	...	962	263	628	178	144	13	1	...	...	13	1

TABLE 27—RATED BED CAPACITY AND BEDS SET UP IN HOSPITALS BY TYPE OF BED AT DECEMBER 31st, 1958 (Continued)

HOSPITAL	RATED BED CAPACITY						BEDS SET UP AT MIDNIGHT, DECEMBER 31, 1958											
	TYPE OF BED						TYPE OF BED											
	Total	Basinets	Medicine and Surgery	Obstetric	Children's	Orthopedic	Psychiatry	Communicable Diseases	Other	Total	Basinets	Medicine and Surgery	Obstetric	Children's	Orthopedic	Psychiatry	Communicable Diseases	Other
90 - 179 BEDS																		
Calgary Crippled Children's	156	22	66	22	156			2		120	22	66		120				
Camrose	98	20	50	24	8					98	21	57		8			2	
Drumheller	94	12	69	10	10					101	12	69		10	10			
Lamont	91	30	70	19	15					104	30	70		15				
Red Deer	104																	
Total	543	84	255	75	201	10		2		514	85	262	75	165	10		2	
180 BEDS AND OVER																		
Calgary General	736	110	476	93	84	46	20	17		736	110	476	93	84	46	20	17	
Calgary Holy Cross	338	54	189	53	50	46				338	54	189	53	50	46			
Edmonton General	371	69	273	47	51					347	69	249	47	51				
Edmonton Misericordia	342	60	239	51	50				2	341	69	239	50	50				2
Edmonton Royal Alexandra	654	155	282	134	115	46		34	36	654	155	289	134	115	46		34	36
Edmonton University	1,005	179	644	60	139	131	31			966	73	639	60	105	131	31		
Lethbridge Municipal	192	58	126	42	24					193	58	127	42	24				
Lethbridge St. Michael's	181	18	120	30	30			1		184	18	129	30	34			1	
Medicine Hat Municipal	243	37	178	42	23					232	32	167	42	23				
Totals	4,062	636	2,534	552	566	269	51	52	38	4,001	638	2,504	551	536	269	51	52	38
GRAND TOTAL	7,441	1,447	4,603	1,193	1,164	279	51	108	43	7,686	1,464	4,824	1,209	1,177	279	51	103	43

*The Portion used by Alberta residents only.

TABLE 23—ANALYSIS OF HOURS WORKED BY ALL PAID PERSONNEL FOR THE YEAR 1958

ANNUAL REPORT, 1958

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Hospital	Total Hours	NURSES			Nurses' Aides		Orderlies	Interns	Physio- therapists	Pharmacists	Dietitians	Medical Record Librarians	Technicians		Social Service Workers	Other Paid Personnel
		Graduate	Student	Graduate	Graduate	Trainee							Laboratory	Radiology		
1 - 29 BEDS	42,503	18,241	.....	7,316	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,593	.....	16,946
Bassano	33,151	10,192	.....	5,217	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31,352
Beaverlodge	28,080	10,794	.....	5,562	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,732
Bentley	30,466	6,143	.....	1,272	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,375
Berwyn	17,326	9,600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,624
Bonnyville K.H.P.	73,070	25,771	.....	14,504	.....	2,304	.....	.....	.....	.....	.....	.....	2,304	.....	.....	7,318
Camrose	26,409	13,460	.....	8,843	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,007
Cardston	68,423	5,181	.....	4,174	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,360
Castor	33,931	5,964	.....	3,208	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39,273
Cerise	20,044	11,220	.....	4,625	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,589
Cold Lake	42,997	11,220	.....	7,909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,904
Crestdale	34,561	11,993	.....	12,764	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,900
Consort	37,480	10,988	.....	11,311	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,659
Coronation	53,815	12,784	.....	4,452	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,440
Daysland	21,462	8,488	.....	1,596	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,678
Devon	21,812	18,272	.....	346	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,335
Drayton Valley	42,680	8,403	.....	7,766	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,140
Eckville	27,917	6,624	.....	6,623	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29,199
Elmore	25,762	7,251	.....	5,952	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,348
Empress	51,905	6,137	.....	14,892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,543
Fort McMurray	38,421	9,140	.....	2,856	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,896
Glendon	23,471	17,472	.....	16,977	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29,807
Hardisty	71,493	18,461	.....	7,009	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,196
Hythe	25,381	44,412	.....	6,224	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34,932
Imperial	51,360	10,295	.....	14,001	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,932
Islay	44,975	11,724	.....	2,654	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,956
Jasper	32,156	10,608	.....	14,495	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	808
Killam	28,442	12,430	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	808
Magrath	57,232	9,189	.....	4,656	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,238
Manning	37,339	38,929	.....	3,156	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	700
Mannville	26,258	10,956	.....	4,208	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,238
Mayerthorpe	38,963	17,803	.....	1,931	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	900
Mercoal	59,984	11,091	.....	12,979	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	889
Mundare	59,984	13,750	.....	14,044	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	192
Myrnam	38,929	17,803	.....	4,893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	918
Oyen	38,929	17,803	.....	18,313	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,584
Provost	38,929	17,803	.....	14,044	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,080
Radway	59,984	11,091	.....	12,979	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	352
Raymond	27,640	5,853	.....	2,635	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	898
Simsey Lake	59,400	13,779	.....	4,893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,138
Smoky Lake	46,085	15,101	.....	18,313	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,127
Turner Hills	36,893	13,480	.....	712	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,110
Vilna	40,368	16,984	.....	1,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,066
Willingdon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,171
Totals	1,772,802	501,421	.....	218,219	76,057	21,329	.....	.....	.....	.....	68,971	8,998	22,481	21,610	.....	833,716

TABLE 28—ANALYSIS OF HOURS WORKED BY ALL PAID PERSONNEL FOR THE YEAR 1958 (Continued)

Hospital	Total Hours	Nurses				Orderlies	Interns	Physio-therapists	Pharmacists	Dietitians	Technicians			Social Service Workers	Other Paid Personnel
		Graduate	Student	Graduate	Trainee						Medical Record Librarians	Laboratory	Radiology		
30 - 89 BEDS															
Athabasca	73,326	24,460		19,450		1,588		1,868		2,400	2,044	1,248	1,248		26,920
Baff	108,548	34,156		2,256						3,286		2,202	2,202		59,532
Barhead	112,799	26,705		13,419							1,991	2,202	2,202		61,588
Blainmore	102,611	24,064		16,364		2,080					2,856	4,408	3,669		58,095
Bonnyville St. Louis	114,175	19,275		13,800		1,984				14,432	2,856	2,304	2,304		54,328
Brooks	126,720	43,776		18,432	13,824					2,304	2,304	2,304	2,304		71,452
Calgary Grace	51,168	16,588		9,894								1,040	1,040		31,206
Clareholm	72,800	27,040		12,480						9,565		1,158	1,158		50,303
Didsbury	93,368	25,064		6,120							2,067	1,589	1,255		35,762
Edson	72,047	21,945		3,639	5,730							1,132	1,132		50,857
Elk Point	105,355	17,993		27,200	34,241					14,004	6,088	1,011	1,011		20,542
Fairview	92,936	23,080		13,352								1,281	1,281		27,619
Fort Macleod	73,038	29,469										312	504		34,878
Fort Vermilion	37,998	2,304										1,499	1,499		34,763
Galahad	74,432	11,906		14,032		1,832				10,733		3,400	5,668		82,088
Grande Prairie	181,953	49,192		37,853						2,928	1,920	2,928	2,288		55,632
Hanna	149,836	35,360		29,846	16,326					21,502	1,610	2,811	2,785		85,029
High Prairie	144,376	26,215		4,424								1,102	1,102		46,303
High River	100,134	38,435		8,796	4,396					4,160	1,574	2,585	2,585		56,367
Lacombe	125,354	38,081		25,736						4,544	2,820	5,056	2,080		65,999
Mac La Biche	88,679	12,786								2,040	4,408	2,248	2,380		59,694
McLennan	142,329	31,583		31,705	708							2,204	2,204		64,359
Olds	171,358	21,582		17,016								1,824	1,824		49,184
Pace River	105,526	26,601		9,536								817	870		43,558
Poncha Creek	103,155	24,895		16,600						4,576		3,780	1,500		37,244
Rocky Mountain House	56,479	13,892		17,016						16,647	713	2,628	2,628		102,459
Spirit River	82,315	13,981		12,034	13,907					4,056	3,911	2,088	3,911		101,920
Stettler	172,854	48,604		20,034		4,200				6,912		682	1,922		58,904
St. Paul	135,075	18,265		7,097		2,628						1,139	1,139		24,750
Taber	172,381	59,054		45,355		2,288				16,089	5,403	1,576	2,600		89,833
Tofield	47,694	12,733		6,333						2,496		1,293	1,293		38,123
Trochu	43,797	5,068		13,137								1,040	1,040		11,215
Two Hills	58,287	11,362		10,181						2,920		3,192	4,075		50,462
Vegreville	39,720	444				2,184						645	1,356		106,330
Vermilion	190,653	39,720	34,209	15,708	1,056										49,944
Viking	72,168	22,881		14,604											
Vulcan	70,734	16,178		11,184		11,460									
Wainwright	43,163	15,912													
Wainwright	101,962	33,188		11,184											
Westlock	162,891	31,502		19,338	9,363										
Wetaskiwin	117,763	37,117													
Totals	4,189,292	36	1,059,805	34,209	490,471	168,724	33,418	1,868		145,930	38,726	85,861	79,279		2,050,965

TABLE 29—HOSPITAL STAFF—BASED ON FULL-TIME EMPLOYMENT DURING 1958
(TOTAL PAID EMPLOYEE HOURS DIVIDED BY 2,080 HOURS)

Hospitals	Total	Doctors	Nurses		Nurses' Aides		Orderlies	Interns	Physio-therapists	Pharmacists	Dietitians	Medical Record Librarian	Technicians		Social Service Workers	Other Paid Personnel
			Graduate	Student	Graduate	Trainee							Laboratory	Radiology		
1 - 29 BEDS	20.4	...	8.8	...	3.5	...	...	...	...	...	...	...	...	...	...	8.2
Bassano	4.9	...	5.2	...	2.5	...	...	...	...	...	...	...	...	...	...	13.1
Beaverlodge	13.8	...	3.0	...	2.7	...	...	...	...	...	...	...	...	...	...	9.1
Bentley	13.5	...	4.6	...	1.6	...	...	...	...	...	...	...	...	...	...	9.4
Berwyn	14.6	...	4.8	...	...	...	...	...	...	...	...	...	...	...	...	8.4
Bonnyville K.H.P.	8.3	...	12.4	...	7.0	...	1.1	...	...	...	1.0	.5	1.1	...	...	8.5
Canmore	35.1	...	...	...	...	...	...	...	...	...	1.2	...	...	...	...	12.0
Cardston	12.7	...	6.5	...	...	...	...	...	...	...	1.1	.8	...	...	...	5.0
Carmangay	32.9	...	2.5	...	4.2	...	4.4	...	...	...	1.1	...	.5	...	...	18.9
Castor	11.5	...	2.9	...	2.0	...	...	...	...	...	3.1	...	...	...	...	6.6
Cereal	14.4	...	1.3	...	1.5	4.2	...	...	...	...	...	...	...	...	...	4.3
Coaldale	20.7	...	5.4	...	2.2	...	4.5	...	...	...	...	...	...	...	...	7.7
Cold Lake	16.6	...	5.8	...	...	3.8	...	...	...	...	1.1	...	...	...	...	7.0
Consort	18.0	...	5.3	...	...	6.1	...	...	...	...	1.1	...	...	...	...	5.5
Constitution	25.9	...	6.2	...	5.4	...	...	...	...	...	4.5	1.6	1.2	1.1	...	7.5
Devon	10.3	...	4.1	...	2.0	.2	...	...	...	...	...	...	1.0	...	...	1.6
Drayton Valley	10.5	...	4.2	...	.8	...	...	...	...	...	...	...	...	...	...	4.9
Eckville	20.5	...	5.4	...	...	...	...	...	...	...	...	...	1.1	...	...	14.0
Elnora	13.4	...	4.2	...	3.7	...	...	...	...	...	...	...	...	...	...	5.4
Empress	12.4	...	3.2	...	3.2	...	...	...	...	...	...	...	...	...	...	4.6
Fort McMurray	23.5	...	3.5	...	2.9	...	...	...	...	...	...	...	...	...	...	20.1
Glendon	16.8	...	4.0	...	7.2	...	...	...	...	...	2.9	.3	...	...	...	14.3
Hardisty	23.3	...	4.5	...	...	...	...	...	...	...	4.2	...	...	...	...	6.6
Hythe	11.3	...	4.5	...	...	...	...	...	...	...	...	...	...	...	...	5.4
Innisfail	34.4	...	8.4	...	8.2	...	...	...	...	...	...	...	...	...	...	16.8
Islay	12.2	...	3.0	...	...	...	...	...	...	...	...	...	...	...	...	5.7
Jasper	21.2	...	8.9	...	3.4	...	...	...	...	...	...	...	...	...	...	10.2
Killam	24.7	...	4.9	...	1.4	...	...	...	...	...	1.4	...	...	...	...	8.4
Killam	21.6	...	5.6	...	6.7	...	...	...	...	...	1.6	1.0	...	...	...	16.2
Magrath	15.4	...	5.6	...	1.3	...	...	...	...	...	...	...	...	...	...	8.4
Manning	13.7	...	5.1	...	...	...	...	...	...	...	...	...	...	...	...	8.6
Mannville	27.5	...	6.0	...	7.0	...	...	...	...	...	1.2	...	...	...	...	12.3
Mayerthorpe	7.1	...	4.4	...	...	...	...	...	...	...	1.0	...	...	...	...	10.7
Mercoal	18.0	...	7.1	...	...	...	...	...	...	...	...	...	...	...	...	10.7
Mundare	18.7	...	4.8	...	...	...	...	...	...	...	...	...	...	...	...	7.6
Myrnam	12.6	...	5.3	...	2.2	3.3	...	...	...	...	...	...	...	...	...	4.7
Oyen	28.8	...	8.6	...	1.5	1.2	...	...	...	...	...	...	...	...	...	13.9
Provost	19.5	...	4.4	...	2.0	3.2	...	...	...	...	...	...	...	...	...	11.9
Rayway	28.8	...	4.4	...	.9	...	...	...	...	...	...	...	...	...	...	11.9
Raymond	19.2	...	5.3	...	...	6.2	...	...	...	...	1.2	...	...	...	...	13.4
Simbsey	28.8	...	6.6	...	6.8	...	...	...	...	...	2.3	...	...	...	...	4.4
Smoky Lake	13.3	...	2.1	...	2.1	1.3	.3	...	...	...	1.0	...	...	...	...	13.4
Three Hills	28.6	...	6.6	...	8.8	...	...	...	...	...	2.2	...	...	...	...	6.8
Theriot	22.2	...	7.3	...	...	...	...	...	...	...	...	...	...	...	...	10.7
Valley View	17.7	...	6.5	...	.3	7.1	...	...	...	...	1.6	...	...	...	...	9.1
Willingdon	19.4	...	8.2	...	.9	...	...	...	...	...	...	...	...	...	...	9.6
Total	852.3	...	241.1	...	104.9	36.6	10.3	...	...	...	33.2	4.3	10.8	10.4	...	400.8

[illegible]

TABLE 29—HOSPITAL STAFF—BASED ON FULL-TIME EMPLOYMENT DURING 1958 (Continued)
(TOTAL PAID EMPLOYEE HOURS DIVIDED BY 2,080 HOURS)

Hospitals	Total	Doctors	Nurses			Nurses' Aides		Orderlies	Interns	Physio-therapists	Pharmacists	Dietitians	Technicians			Social Service Workers	Other Paid Personnel
			Graduate		Student	Graduate	Trainee						Medical Librarian	Laboratory	Radiology		
90 - 179 BEDS																	
Calgary Crippled Children's	128.5	...	33.8	...	26.2	...	1.4	...	2.9	.2	.8	1.2	1.1	.9	1.9	56.2	
Calgary General	142.7	...	30.5	...	19.0	...	3.0	...	.5	...	...	2.0	4.0	4.0	...	71.2	
Camrose	99.4	...	32.4	...	8.2	...	5.5	...	...	...	...	1.0	1.0	2.0	...	44.3	
Drumheller	88.3	...	20.1	13.4	...	...	.7	.5	...	.4	1.0	2.6	.9	2.2	...	46.5	
Lamont	131.6	...	36.5	...	4.9	...	1.0	...	...	...	1.0	2.0	3.0	3.3	...	79.9	
Red Deer	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	588.4	...	153.3	13.4	58.2	13.5	8.9	.5	3.4	1.1	3.8	8.8	11.0	12.4	1.9	298.1	
180 BEDS AND OVER																	
Calgary General	1,268.4	3.6	366.0	177.5	120.2	12.2	36.4	15.2	9.0	4.4	7.9	3.0	24.6	16.4	.8	471.2	
Calgary Holy Cross	648.5	2.8	160.9	82.1	40.3	5.3	16.2	7.2	2.3	1.0	5.1	1.0	20.7	5.5	...	298.0	
Edmonton General	777.9	3.0	190.6	109.7	16.6	...	17.7	15.6	1.9	1.0	3.1	3.1	26.4	12.2	...	317.1	
Edmonton Misericordia	666.6	4.1	163.9	79.7	25.6	...	15.2	12.7	1.7	1.4	4.4	1.0	13.6	4.2	1.4	337.8	
Edmonton Royal Alexandra	1,153.1	3.7	231.1	137.9	82.6	...	42.4	35.6	4.1	5.1	6.6	16.0	33.9	15.5	...	538.5	
Edmonton University	1,318.8	15.2	279.9	175.2	51.4	10.4	74.4	79.2	15.2	5.8	5.6	2.4	37.0	5.4	1.0	665.7	
Lethbridge Municipal	583.2	1.5	78.5	45.5	17.7	...	10.4	.1	1.7	1.1	1.5	1.0	15.7	7.0	...	151.5	
Lethbridge St. Michael's	283.2	...	65.3	46.8	6.3	...	6.5	1.1	2.7	1.2	.9	3.9	11.7	7.9	...	110.7	
Medicine Hat Municipal	264.3	.2	74.3	23.5	8.9	...	5.7	...	...	1.0	1.0	.7	2.6	.9	...	145.5	
Total	6,836.1	34.2	1,610.8	978.0	369.6	27.9	224.8	166.7	38.6	21.9	36.0	32.1	181.2	75.1	3.2	3,035.4	
GRAND TOTAL	10,290.7	34.2	2,514.7	1,007.9	768.6	159.1	260.0	167.3	43.0	23.0	143.1	63.8	244.3	136.0	5.1	4,720.8	

\$0.003

††0.002

TABLE 30.—DISTRIBUTION OF ACCUMULATED HOURS OF WORK OF ALL PAID PERSONNEL, 1958

Hospitals	PROFESSIONAL CARE OF PATIENTS										General Service Departments						
	Total	General-Admin- istration	Operating Room	Delivery Room	Pharmacy (Dispensary)	Medical and Surgical Supplies	Laboratory	Diagnostic Radiology	Physio- therapy	Nursing— of Patients	Medical Records and Library	Other	Dietary	Laundry	Bedding and Linen	House- keeping	Physical Plant
1 - 29 BEDS																	
Bassano	42,503	4,560	250	250	766	150	350	650		20,681			4,118	3,180	250	3,649	3,649
Beaverlodge	43,137	3,044						1,363		22,897			4,840	3,143		5,316	5,316
Bentley	28,743	3,750	380	58	366		246	263		13,027		101		2,389		2,070	2,070
Berwyn	30,486	3,924	300	150	500	300	100	450		13,942			6,048	1,332	379	3,264	2,064
Bonnyville K.H.P.	17,326	3,660	145	468	180	173	246			7,152			7,200	4,020	600	3,100	2,700
Canmore	73,070	7,287	2,304	2,304	915	100	2,304	1,204		28,919	1,100	2,304	1,599	1,733		1,464	1,080
Cardston	30,496	3,924	2,840	479	96	100	1,126	976		23,210			2,589	6,912	190	3,163	4,608
Carmangay	73,070	7,287	2,304	2,304	915	100	2,304	1,204		28,919	1,100	2,304	1,599	1,733		1,464	1,080
Carmangay	73,070	7,287	2,304	2,304	915	100	2,304	1,204		28,919	1,100	2,304	1,599	1,733		1,464	1,080
Castor	39,931	2,460	100	125	130	180	225	270		8,648			4,998	2,480	600	2,096	1,359
Cereal	28,423	6,520	523	96	145	100	1,126	976		23,210			2,589	6,912	190	3,163	4,608
Coaldale	30,044	3,553	200	111	440	220	12	746		10,491			6,424	3,792	600	2,096	1,359
Cold Lake	42,997	5,410	250	250	766	150	350	650		20,681			4,118	3,180	250	3,649	3,649
Consort	34,561	2,978	1,738	1,280		125	667	1,333		17,059			6,552	2,288		2,184	3,739
Coronation	37,480	2,978	1,738	1,280		125	667	1,333		17,059			6,552	2,288		2,184	3,739
Daysland	53,815	5,505	552	2,286	156	552	2,286	1,160		19,460	185		9,244	4,056	250	4,704	2,204
Devon	21,462	2,168	805	135	200	500	938			7,442	568	1,413	2,578	2,402	2,000	1,040	1,239
Drayton Valley	21,812	1,846	1,652	1,652		413	938		192	15,797			2,404	1,700		2,578	2,914
Eckville	42,680	3,514	228	350		18	1,712	328		14,569		764	1,000	288	1,272	2,964	2,000
Elmira	27,917	5,268	2,330	1,822	535		1,712	328		14,569		764	1,000	288	1,272	2,964	2,000
Empress	25,905	7,184	98	632	60	46	1,712	328		22,421	632	80	8,216	5,084	4,780	8,750	3,529
Fort McMurray	34,855	2,976	104	106	156	188	186	368		19,441			4,860	2,480	125	7,450	2,570
Glenora	48,421	4,923	756	125	155	188	438	306		18,637			8,730	3,786		7,670	2,582
Hardisty	23,471	2,483								9,792			12,584	1,788	1,248	3,605	4,73
Hythe	71,493	2,903	2,112	1,092				2,112		33,357			2,367	2,965		2,365	4,992
Innisfail	25,381	2,905	61	75			96	96		12,557			2,800	2,600		1,365	6,113
Islay	44,412	3,000	2,400	2,400	600	600	808	808		22,557			7,069	4,309	1,050	5,157	1,670
Jasper	51,360	5,249	1,796	294	467		1,133	1,238	101	10,061	247		7,069	4,309		5,157	1,670
Killam	44,975	1,152	500	186			1,133	1,238		22,640			7,069	4,309		5,157	1,670
Magrath	32,156	5,148	596	548			800	889		25,039			9,850	2,304	4,608	3,038	2,304
Manning	28,442	2,756	182	140	215	3,006	215	395		22,640		280	2,304	2,000		2,236	2,304
Marysville	57,232	4,850	322	196			918	1,121		14,002			4,312	4,016		4,568	2,726
Meadow Lake	14,704	2,948	141	130			918	1,121		14,002			4,312	4,016		4,568	2,726
Mercer	38,929	3,547	241	360	1,260	2,013	501	332		23,554	482	330	2,080	4,858	48	1,472	1,088
Mundare	38,929	3,547	241	360	1,260	2,013	501	332		23,554	482	330	2,080	4,858	48	1,472	1,088
Myram	38,929	3,547	241	360	1,260	2,013	501	332		23,554	482	330	2,080	4,858	48	1,472	1,088
Oyen	59,861	5,844	1,500	600	110	600	918	1,121		13,113	360		7,506	1,693	190	2,460	3,281
Provost	40,663	4,898	604	130	180	280	501	332		18,013			5,656	1,360	560	1,160	1,620
Rayway	39,897	4,787	796	804	1,260	676	961	1,286		11,748	460	540	2,700	1,360		9,120	1,620
Rimbey	59,861	5,844	1,500	600	110	600	918	1,121		13,113	360		7,506	1,693	190	2,460	3,281
Smoky Lake	27,640	5,512	1,867	640	96	96	85	120		20,466	1,500		9,316	4,560	420	2,220	3,333
Three Hills	59,400	4,754	141	536	120	120	248	252		14,409	120		6,840	3,166		9,120	1,620
Turner Valley	46,085	3,223	276	127	180	480	215	112		21,121			8,172	6,128	140	8,050	4,086
Vilna	36,883	4,315	276	78						23,196	96	75	8,172	6,128	140	8,050	4,086
Willington	40,368	3,840	110	120	180			2,304		16,284	240		7,728	5,424	760	2,253	3,255
Totals	1,772,802	174,944	27,551	19,392	11,705	12,681	25,414	28,607	293	744,116	7,624	7,119	265,293	136,942	24,430	180,687	106,004

TABLE 30—DISTRIBUTION OF ACCUMULATED HOURS OF WORK OF ALL PAID PERSONNEL,* 1958 (Continued)

Hospitals	PROFESSIONAL CARE OF PATIENTS										General Service Departments						
	Total	General Admin- istration	Operating Room	Delivery Room	Pharmacy (Dispensary)	Medical and Surgical Supplies	Laboratory	Diagnostic Radiology	Physio- therapy	Nursing— Direct Care of Patients	Medical Records and Library	Other	Dietary	Laundry	Bedding and Linen	House- keeping	
30 - 89 BEDS																	
Athabasca	73,326	4,349	734	832	360	946	824	1,689	1,868	39,860	2,460	254	10,307	3,644	51	5,806	4,314
Banff	108,548	13,064	1,382	460	360	3,020	2,202	2,202	.....	35,544	2,460	.....	18,447	7,902	2,400	11,213	5,770
Barrhead	112,799	15,709	2,690	1,200	800	1,950	2,905	2,905	.....	41,628	1,991	.....	17,368	7,824	2,392	13,477	4,990
Blairmore	102,611	10,979	2,108	220	288	250	323	1,665	.....	38,556	380	.....	13,560	6,950	.....	13,477	13,855
Bonnyville St. Louis	114,175	18,370	4,378	2,024	1,674	.....	4,408	3,092	.....	49,799	2,856	.....	14,432	4,409	3,348	11,688	3,697
Brooks	126,720	10,368	2,304	2,304	4,004	706	2,304	2,304	.....	74,880	2,804	879	10,368	2,304	2,304	11,520	3,456
Calgary Grace	51,168	6,138	2,715	1,213	4,004	706	1,907	1,040	.....	18,500	552	.....	9,307	4,203	5,301	2,076	2,107
Clareholm	72,800	6,240	2,080	1,040	1,805	1,805	1,040	1,700	.....	34,320	.....	.....	12,019	4,622	1,518	10,400	2,080
Didsbury	93,368	5,861	3,791	1,798	1,805	1,805	1,589	1,255	.....	30,075	2,068	78	15,019	4,460	920	14,272	4,840
Edson	105,355	10,144	1,126	988	.....	.....	2,264	1,011	.....	37,637	.....	.....	12,019	4,460	920	14,272	4,840
Elk Point	72,047	5,605	774	524	1,805	1,805	2,264	1,011	.....	30,075	2,068	78	15,019	4,460	920	14,272	4,840
Fairview	92,936	6,088	2,304	1,157	.....	.....	1,011	1,011	.....	40,945	.....	.....	13,150	4,460	920	14,272	4,840
Fort Macleod	73,038	7,143	2,304	1,102	1,248	.....	1,281	1,281	.....	40,945	.....	.....	13,150	4,460	920	14,272	4,840
Fort Vermilion	37,998	3,984	93	102	1,248	.....	773	1,499	.....	38,169	.....	3,761	14,004	8,088	2,278	15,790	6,120
Galahad	74,432	10,877	1,420	1,380	1,248	.....	1,281	1,499	.....	50,280	.....	.....	14,004	8,088	2,278	15,790	6,120
Grande Prairie	181,953	5,656	4,608	9,216	.....	1,163	773	5,688	.....	38,169	.....	.....	4,559	5,053	1,560	9,215	2,876
Hanna	148,836	7,050	2,599	1,909	283	1,369	3,400	2,891	.....	25,938	1,920	.....	7,545	4,608	1,560	9,215	2,876
High Prairie	144,376	12,701	5,756	682	360	360	2,891	2,891	.....	75,406	1,920	.....	23,040	9,216	360	39,208	4,608
High River	148,836	7,050	2,599	1,909	283	1,369	3,400	2,891	.....	75,406	1,920	.....	23,040	9,216	360	39,208	4,608
Lacombe	125,354	9,122	2,293	2,293	572	572	1,716	1,716	.....	45,335	1,610	.....	21,502	8,571	1,406	11,606	6,498
Lac La Biche	88,679	7,517	2,293	2,293	572	572	1,716	1,716	.....	45,335	1,610	.....	21,502	8,571	1,406	11,606	6,498
McLennan	142,729	18,327	1,392	1,164	610	360	5,056	4,160	382	46,952	1,574	.....	19,768	10,169	1,144	13,728	2,860
Olds	91,339	9,676	5,186	2,927	.....	.....	2,249	2,247	.....	54,042	.....	.....	13,609	8,836	2,398	3,679	4,114
Peace River	107,626	7,712	2,869	2,316	.....	.....	2,249	2,247	.....	41,202	.....	.....	22,397	5,806	331	20,191	8,511
Pincher Creek	95,574	6,612	3,306	2,316	.....	.....	2,448	2,380	.....	50,887	.....	.....	17,852	4,966	2,086	10,960	4,676
Ponoka	103,155	6,935	2,396	2,396	.....	.....	2,204	2,204	.....	35,659	4,408	.....	16,530	8,160	2,086	6,720	4,676
Rocky Mountain House	56,479	6,988	745	602	664	48	1,824	1,824	.....	11,127	.....	.....	16,530	8,160	2,204	9,879	4,408
Spirit River	82,315	17,972	1,856	2,750	720	2,912	956	1,436	.....	26,535	.....	.....	9,015	2,891	.....	5,270	2,769
Stettler	172,854	7,600	5,256	13,140	300	2,912	2,628	2,628	.....	23,424	.....	.....	12,438	5,552	2,632	6,933	3,600
St. Paul	155,075	12,751	2,150	4,695	821	3,466	4,056	3,911	.....	59,891	713	595	14,280	13,140	220	23,652	3,942
Taber	172,381	14,739	9,652	9,652	821	7,502	2,088	2,088	.....	59,891	713	595	16,447	15,366	3,036	29,598	7,126
Tofield	47,694	3,408	770	682	.....	.....	2,088	2,088	.....	16,612	.....	.....	18,472	15,366	2,180	9,952	22,236
Trochu	43,797	3,076	106	104	52	40	858	1,022	.....	17,672	.....	.....	16,447	15,366	2,180	9,952	22,236
Two Hills	58,287	7,904	106	104	52	40	858	1,022	.....	17,672	.....	.....	16,447	15,366	2,180	9,952	22,236
Vegreville	179,331	16,960	4,850	3,578	787	873	6,170	2,600	.....	27,533	5,403	.....	11,377	2,446	800	3,609	2,596
Vermilion	72,168	4,608	1,250	514	100	88	1,576	1,576	.....	77,702	.....	.....	16,089	10,139	8,506	18,060	8,191
Viking	70,734	6,121	235	253	733	144	1,293	1,293	.....	36,936	5,403	.....	10,256	2,448	144	8,060	4,608
Vulcan	2,342	3,720	1,272	2,342	100	88	1,576	1,576	.....	36,936	5,403	.....	10,256	2,448	144	8,060	4,608
Wainwright	101,962	5,004	2,400	2,400	600	600	1,040	1,040	.....	21,898	.....	.....	4,670	2,709	670	1,306	2,496
Westlock	162,891	17,395	3,640	2,960	738	.....	4,896	2,232	.....	43,764	.....	.....	9,080	7,148	.....	19,408	4,430
Wetaskiwin	117,763	6,353	4,160	384	.....	.....	3,192	4,075	.....	65,788	.....	.....	24,564	10,268	4,654	17,913	7,704
Totals	4,177,970	357,297	97,793	80,272	16,732	27,858	85,230	77,555	2,250	1,832,752	31,167	5,567	562,997	260,129	60,206	466,391	213,774

90 - 179 BEDS													
Calgary Crippled Children's	261,104	25,617	7,146	.....	384	.....	2,080	.....	1,957	8,149	103,104	2,434	12,638
Canross	296,745	14,560	10,975	13,520	1,040	1,040	8,320	8,320	2,124	1,040	146,610	4,160	2,080
Drumheller	206,689	27,435	10,975	2,124	1,344	1,344	3,186	3,186	2,124	2,080	23,364	2,124	2,124
Lacombe	178,932	15,600	7,228	4,552	900	900	1,788	4,359	4,359	350	34,818	5,404	3,111
Red Deer	273,696	27,040	12,480	3,270	6,240	6,240	6,240	6,854	6,854	6,240	31,200	4,160	4,160
Totals	1,217,176	110,252	52,389	23,466	12,416	4,448	21,754	23,564	9,189	506,143	18,282	21,308	57,923
Totals													
180 BEDS AND OVER													
Calgary General	2,581,746	170,400	125,707	15,832	81,942	15,832	83,672	52,173	18,720	1,224,499	24,656	48,461	263,031
Calgary Holy Cross	1,285,386	94,620	77,097	17,833	38,765	13,202	58,347	20,550	7,588	655,734	17,441	36,032	141,362
Edmonton General	1,440,502	88,144	87,141	37,424	40,721	12,420	76,607	26,570	7,588	680,925	21,368	14,633	163,424
Edmonton Misericordia	1,364,507	82,881	76,575	15,245	49,152	7,316	63,468	23,988	5,288	633,147	19,659	49,388	123,411
Edmonton Royal Alexandra	2,372,363	186,428	109,884	32,293	73,307	22,252	95,560	54,861	13,262	955,578	33,368	43,077	203,010
Edmonton University	3,071,797	179,313	176,884	22,859	70,024	22,859	92,883	57,155	69,930	1,498,665	38,811	69,701	271,645
Lethbridge Municipal	676,740	43,133	38,686	7,474	16,016	4,824	21,840	12,756	5,778	254,640	8,413	18,549	86,458
Lethbridge St. Michael's	529,953	39,984	30,798	9,950	16,658	4,824	21,840	8,799	5,778	251,387	8,127	7,982	66,595
Medicine Hat	536,426	38,975	29,669	9,128	13,440	4,208	10,862	1,888	.....	230,232	5,442	.....	19,542
Totals	13,859,480	923,878	752,541	277,341	385,337	110,515	594,487	270,327	131,229	6,284,807	177,285	287,823	1,385,094
Totals													
GRAND TOTAL	21,027,428	1,566,371	930,274	341,346	497,447	143,400	726,885	400,053	142,961	9,367,818	234,358	321,817	2,350,828
GRAND TOTAL													

*Excluding hours reported under Nursing—School of Nursing.

TABLE 31—AVERAGE HOURS OF WORK OF PAID PERSONNEL* PER PATIENT DAY, 1958

Hospital	Total Patient Days (Incl. Newborn)	Total Hours of Work	General Administration	Nursing—Direct Care of Patients	Other Professional Care	Dietary	Laundry	Bedding and Linen	House-keeping	Physical Plant
1 - 29 BEDS										
Bassano	7,375	5,76	.62	2.80	.33	.56	.43	.03	.49	.49
Beaverlodge	5,643	7,64	.54	4.06	.28	.86	.56	...	.94	.41
Bentley	3,777	7,61	.99	3.45	.37	.98	.63	...	.64	.55
Berwyn	4,757	5,90	.22	2.93	...	1.27	.28	.08	.69	.43
Bonnyville K.H.P.	3,006	10,15	1.31	2.38	.60	2.40	1.34	.20	1.03	.90
Cammore	2,785	6,22	1.28	2.44	.39	.57	.62	...	.53	.39
Cardston	8,007	9,13	.91	3.61	1.44	1.15	.86	...	.58	.58
Castangay	2,011	13,13	1.41	5.62	1.16	1.29	1.35	.09	1.57	.64
Cearal	7,124	9,60	.52	3.26	.77	2.22	1.29	.13	.69	.35
Coaldale	2,517	9,51	.99	3.44	.42	1.98	.99	...	.89	.71
Cold Lake	3,085	6,05	.60	3.44	.39	2.22	.64	.10	.35	.23
Consort	7,352	9,85	.74	2.99	.16	1.03	.43	...	.43	.43
Coronation	3,839	7,77	.57	4.44	.17	1.11	.37	...	.57	.97
Daysland	4,770	7,86	.62	4.03	.74	.66	.48	.03	.88	.48
Devon	8,366	6,42	.70	2.58	...	1.70	.48	.65	.96	.26
Drayton Valley	3,056	6,93	.70	2.41	1.79	.72	.33	.85	1.01	.49
Eckville	2,527	8,63	.93	2.61	2.01	1.02	.55	.21	1.05	.53
Elmira	3,768	7,01	.93	3.87	.42	1.56	.39	...	.79	.76
Empress	3,595	7,41	.93	3.87	.20	.64	.45	.35	.76	.43
Fort McMurray	4,507	7,17	1.47	1.73	2.08	.28	1.13	.06	1.94	.83
Glendon	3,000	13,74	1.59	4.98	.39	1.82	.83	...	.83	.50
Hardisty	6,491	11,62	.99	6.48	.37	1.62	.58	.02	1.18	.40
Hythe	3,011	7,46	.76	3.25	.31	1.34	.16	...	2.28	.16
Innisfail	10,736	6,66	.82	3.25	...	.71	.70	.12	.34	.46
Islay	3,281	7,79	.89	3.11	.50	1.17	.72	...	.72	.72
Jasper	6,399	6,94	.47	1.57	1.10	.76	.41	.16	1.75	.96
Killam	8,704	5,90	.60	4.73	1.19	.44	.81	...	.59	.19
Magrath	5,295	8,49	.22	2.60	.47	.87	.50	...	1.34	.43
Manning	5,803	5,54	.89	4.73	1.17	.44	.34	.79	.52	.40
Marysville	4,248	6,70	.65	1.03	.13	1.02	...	...	1.33	.53
Mayville	7,285	7,86	.67	2.23	.35	1.35	.55	...	1.33	.37
Mercer	2,482	5,63	1.13	2.63	.78	.80	...	.02	.16	...
Mundare	4,983	7,80	1.41	2.63	.31	1.51	.98	.14	.30	.22
Mynam	4,983	7,10	.82	3.20	1.14	1.33	.34	.04	.49	.66
Oyen	3,674	7,15	.91	3.20	1.34	.73	.77	.15	.32	.44
Provost	6,425	9,37	.91	3.19	1.24	1.06	.71	.42	.79	.79
Radway	4,918	8,27	1.00	2.93	1.59	1.89	.64	.09	1.42	.68
Raymond	5,214	7,65	.92	4.05	.77	.84	.38	...	.38	...
Rimbey	9,983	6,01	.55	2.32	.48	.82	.63	.01	.81	.41
Smoky Lake	4,061	6,81	.50	3.05	.18	.99	.49	.04	.91	.57
Three Hills	7,381	8,05	.64	4.08	.27	1.40	.48	.04	.61	.55
Turner Valley	6,531	7,06	.49	4.16	.10	1.64	.32	...	.35	...
Vilna	4,652	9,10	1.06	3.50	.18	1.99	.64	...	.93	.80
Willingdon	5,766	7,00	.67	2.82	.60	1.34	.94	.13	.39	.11
Total	235,722	7,52	.74	3.16	.60	1.13	.58	.10	.77	.45

30 - 89 BEDS	5.74	34	3.12	.39	.81	.29	†	.45	34
Athabasca	12,785	1,17	3.17	1.26	1.65	.71	.21	1.00	.52
Banff	11,993	1,17	2.42	.44	1.01	.46	.14	.49	.59
Barhead	17,180	.93	3.26	.44	1.15	.59	.38	1.41	1.17
Blairmore	11,822	.93	4.24	1.57	1.23	.38	.28	.98	.31
Bonnyville St. Louis	11,754	.71	4.91	1.76	.68	.15	.15	.76	.23
Brooks	15,295	.68	3.44	.95	.83	.42	.21	.21	.21
Brookview	10,049	.61	1.84	.85	.33	.63	.53	1.04	.44
Calgary Grace	9,955	.63	3.44	1.52	1.74	.49	.14	1.30	.44
Calvin	10,937	.54	3.45	1.15	1.35	.40	.08	.50	.32
Calvin	10,937	.54	2.69	.26	1.35	.25	...	.92	.35
Edson	11,186	.50	2.78	.26	1.35	.25	...	.64	.17
Edson	17,246	.61	3.78	.15	1.11	.63	.18	1.14	.36
Elk Point	12,626	.48	3.78	.15	1.11	.63	...	.29	.01
Fairview	8,072	.58	1.11	.59	.74	.45	.15	.62	.71
Fort Macleod	3,73	.39	2.54	.68	1.05	.39	.23	.41	.17
Fort Vermilion	10,178	1,07	2.71	.89	.83	.33	.01	1.41	.36
Galahad	10,198	.30	2.71	1.04	1.56	.49	.07	.90	.56
Grande Prairie	27,785	.68	5.25	1.04	1.56	.42	.07	.57	.32
Hanna	14,360	.63	3.36	.69	1.06	.29	.07	.83	.39
High Prairie	7,12	.43	2.92	.48	1.18	.62	.12	.13	.21
High River	15,547	.64	3.59	.59	1.20	.45	.02	.43	.41
Lacombe	16,519	.55	2.39	.08	.69	.29	.12	.97	.27
Lac La Biche	19,614	.39	2.74	.67	1.14	.44	.12	.83	.37
McLennan	19,700	.85	3.63	1.11	1.64	.44	.18	.97	.65
Olds	11,347	8.05	2.93	1.02	1.93	.63	.35	.65	.34
Peach River	17,362	6.02	2.99	1.02	1.93	.63	.35	.65	.34
Peach River	11,948	8.00	4.04	.32	1.89	.61	...	.44	.23
Pineau Creek	8,21	.53	4.04	.32	1.89	.61	...	.44	.23
Pineau	12,571	.82	3.26	.63	1.11	.35	.17	1.26	.21
Rocky Mountain House	8,134	.79	4.54	1.31	.79	.70	.01	1.74	.42
Spirit River	15,823	5.20	4.54	1.31	.79	.70	.01	1.74	.42
Stettler	18,827	9.18	3.39	1.20	.98	.45	.18	.39	.21
St. Paul	17,044	.63	2.92	1.32	.83	.43	.09	.89	.21
St. Paul	23,414	4.98	1.62	1.24	.83	.43	.09	.89	.21
Taber	10,273	.33	3.74	.29	1.42	.60	.17	.16	.04
Tofield	4,727	.96	3.21	.29	1.42	.60	.17	.16	.04
Trochu	8,527	.60	3.21	.29	1.42	.60	.17	.16	.04
Two Hills	21,216	.80	3.21	.29	1.42	.60	.17	.16	.04
Vegreville	11,316	.41	3.26	1.11	.76	.48	.40	.71	.30
Vermilion	6,38	.41	3.26	1.11	.76	.48	.40	.71	.30
Viking	9,032	.68	3.83	.44	.94	.32	.08	1.15	.28
Vulcan	8,907	.42	2.46	.64	.82	.38	.15	.31	.30
Wainwright	14,770	.34	2.96	.89	.61	.41	.18	.71	.31
Westlock	25,223	.69	2.61	.58	.61	.41	.18	.71	.31
Wetaskwin	18,131	.35	3.38	.36	1.15	.37	.11	.40	.37
Total	582,810	.61	3.14	.73	.97	.45	.10	.80	.37

DIVISION OF HOSPITAL AND MEDICAL SERVICES

TABLE 31—AVERAGE HOURS OF WORK OF PAID PERSONNEL* PER PATIENT DAY, 1958 (Continued)

Hospital	Total Patient Days (Incl. Newborn)	Total Hours of Work	General Administration	Nursing—Direct Care of Patients	Other Professional Care	Dietary	Laundry	Bedding and Linen	House-keeping	Physical Plant
90 - 179 BEDS										
Calgary Crippled Children's	24,518	10.64	1.04	4.21	1.42	1.11	.51	.08	1.22	1.05
Camrose	30,796	9.64	.47	4.73	1.79	.68	.35	.07	1.01	.54
Drumheller	20,829	9.92	1.32	4.28	1.17	1.12	.51	.10	1.42	.71
Lamont	21,274	8.41	.73	2.66	1.27	1.64	.34	.15	.92	.33
Red Deer	37,958	7.21	.71	2.94	1.20	.82	.44	.11	.66	
Total	135,375	8.99	.81	3.74	1.38	1.02	.43	.09	1.00	.52
180 BEDS AND OVER										
Calgary General	247,806	10.42	.69	4.94	2.11	1.06	.36	.08	.94	.24
Calgary Holy Cross	123,461	10.41	.77	4.50	2.30	1.14	.39	.12	.83	.36
Edmonton General	144,857	9.94	.61	4.70	2.31	1.13	.24	.08	.64	.23
Edmonton Misericordia	131,155	10.40	.63	2.42	2.42	.94	.35	.06	.92	.25
Edmonton Royal Alexandra	247,524	9.58	.75	3.86	2.01	.82	.36	.08	1.14	.58
Edmonton University	301,903	10.17	.59	4.96	2.33	.90	.32	.06	.49	.49
Lebridge Municipal	66,764	10.14	.65	3.82	2.36	1.30	.42	.16	1.09	.34
Lebridge St. Michael's	62,619	8.47	.64	4.01	1.40	1.06	.45	.07	.71	.13
Medicine Hat	51,400	10.44	.76	4.48	1.61	1.30	.38	.07	1.40	.44
Total	1,377,489	10.06	.67	4.56	2.17	1.01	.35	.08	.85	.37
GRAND TOTAL	2,331,396	9.02	.67	4.02	1.60	1.01	.40	.09	.84	.39

*Excluding School of Nursing

†0.003

TABLE 32—MOVEMENT OF IN-PATIENTS BY HOSPITAL, 1958
(Excluding Chronic and Domiciliary Patients)

Hospital	Patients in at the beginning of 1958		Admission to Hospital		Total Patients Under Care		Discharges		Deaths		Patients in at the end of 1958		Number of Stillbirths
	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Total	Adults and Children	Newborn	Adults and Children	Newborn	
1 - 29 BEDS													
Bassano	16	1	863	81	879	82	961	860	81	4	15	1	1
Beaveridge	10	2	737	117	747	119	866	725	116	12	10	2	2
Bendley	11	2	526	45	537	47	584	521	47	6	10	1	1
Bonnyville	10	1	548	83	558	84	642	543	81	10	5	2	2
Bonnyville K.H.P.	1	1	452	48	453	48	501	440	48	3	10	1	1
Camrose	6	1	353	34	359	34	393	345	31	6	8	2	2
Cardston	12	2	1,233	186	1,245	188	1,433	1,218	185	17	3	1	4
Carmanagay	15	1	239	14	244	14	258	237	13	2	16	2	1
Castor	13	1	1,358	76	1,371	77	1,448	1,343	74	12	1	1	1
Cereal	7	1	385	35	382	36	428	382	36	7	2	2	2
Coaldale	8	1	849	90	857	90	947	844	85	6	19	7	3
Cold Lake	12	1	1,087	195	1,099	195	1,294	1,076	184	4	4	4	1
Consort	10	1	502	73	512	73	585	491	63	8	13	2	1
Coronation	14	3	541	60	555	63	618	542	59	4	13	1	2
Daysland	20	2	1,027	58	1,047	60	1,107	1,016	41	1	27	1	1
Devon	7	2	548	39	553	41	596	454	59	2	8	1	3
Drayton Valley	20	2	474	62	474	62	536	454	59	1	18	2	1
Eckville	6	1	300	48	306	48	354	295	47	5	6	1	1
Elmora	5	1	278	48	283	48	346	271	57	4	8	1	3
Empress	8	2	715	57	723	59	782	716	55	1	6	1	1
Fort McMurray	6	1	504	52	510	53	563	503	53	3	4	1	1
Glendon	21	1	646	56	667	57	724	632	56	5	10	1	3
Hardisty	8	1	376	43	384	44	428	374	43	1	28	3	1
Hythe	21	6	1,554	214	1,575	220	1,785	1,530	214	17	10	1	3
Innisfail	10	1	328	26	338	27	365	324	25	5	9	2	2
Jasper	11	5	1,864	181	1,985	186	2,171	1,851	179	3	14	6	3
Killam	28	6	1,364	105	1,392	111	1,503	1,354	108	1	24	2	2
Lacombe	15	2	790	71	820	73	878	786	71	9	10	1	1
Magrath	19	4	801	85	820	89	909	802	86	7	11	3	1
Manning	12	2	489	69	501	71	572	476	68	20	5	1	1
Marmville	23	2	1,282	162	1,184	164	1,348	1,158	160	12	14	2	1
Mayerthorpe	9	1	701	31	710	31	741	683	30	3	7	1	1
Mercoal	12	1	786	24	798	25	823	777	23	15	12	1	1
Mundare	15	3	378	53	383	56	439	384	53	8	11	2	2
Myrnam	11	1	857	107	848	107	955	819	100	4	19	3	2
Oyen	11	2	604	69	615	71	686	601	70	8	6	1	1
Parkland	9	2	750	91	759	93	852	736	90	7	16	2	2
Raymond	30	4	1,403	189	1,433	193	1,626	1,386	185	12	23	6	1
Rimbey	13	3	624	80	637	83	720	627	81	1	9	1	1
Smoky Lake	20	1	838	140	838	141	979	839	136	12	17	2	2
Three Hills	14	1	646	43	660	43	703	632	43	11	17	1	1
Turner Valley	17	3	484	50	493	53	536	473	53	9	11	1	1
Vilna	19	3	739	59	816	59	875	790	56	1	17	2	2
Willingdon	17	1	863	81	879	82	961	860	81	4	15	1	1
Totals	537	73	31,721	3,572	32,258	3,645	35,903	31,372	3,527	333	48	70	41



DIVISION OF HOSPITAL AND MEDICAL SERVICES

TABLE 32—MOVEMENT OF IN-PATIENTS BY HOSPITAL, 1958 (Continued)
(Excluding Chronic and Domiciliary Patients)

Hospital	Patients in at the beginning of 1958		Admission to Hospital		Total Patients Under Care		Discharges		Deaths		Patients in at the end of 1958		Number of Subbirths
	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	
30 - 89 BEDS													
Athabasca	19	207	2,130	2,149	212	2,361	2,100	207	26	22	23	2	1
Banff	23	106	1,268	1,291	106	1,397	1,240	104	22	22	29	2	2
Barriere	47	121	2,040	2,037	222	2,309	2,023	213	21	21	43	7	3
Blainmore	21	129	1,287	1,308	122	1,430	1,250	116	35	35	23	1	4
Bonnyville St. Louis	26	162	1,182	1,182	164	1,372	1,175	158	12	6	21	6	4
Brooks	30	230	2,067	2,097	233	2,330	2,037	226	21	21	39	3	3
Calgary	8	743	666	751	676	1,427	1,427	658	2	2	11	16	11
Claresholm	23	160	1,189	1,212	169	1,377	1,168	161	23	23	21	2	5
Didsbury	26	160	1,299	1,325	163	1,488	1,277	155	23	5	25	3	4
Edson	14	242	1,441	1,455	245	1,700	1,416	237	16	16	23	3	3
Fort Pont	37	164	2,381	2,418	167	2,585	2,351	158	34	5	33	4	1
Fort Macleod	18	170	1,601	1,627	113	1,718	1,552	165	18	7	27	4	2
Fort Vermilion	2	103	834	834	104	938	806	97	16	3	18	2	2
Galahad	25	61	1,376	1,376	61	1,437	1,335	60	14	1	27	4	1
Grande Prairie	63	511	3,327	3,350	517	3,907	3,286	506	40	4	64	7	5
Hanna	18	181	1,525	1,543	183	1,726	1,467	170	36	4	40	10	4
High Prairie	49	314	2,591	2,640	320	2,960	2,591	308	11	7	38	5	4
High River	21	1,787	2,384	2,408	235	2,643	2,140	230	39	3	29	2	4
Lacombe	44	2,000	2,75	2,044	283	2,327	1,968	271	51	19	27	5	5
Lac La Biche	40	2,560	2,022	2,600	206	2,806	2,568	203	19	22	33	3	4
Lloydminster	29	1,356	2,27	1,385	228	1,613	1,323	219	22	5	40	4	4
McLennan	42	217	2,191	2,233	221	2,454	2,188	216	7	2	38	3	1
Olds	22	217	1,429	1,451	219	1,670	1,391	214	36	2	24	3	1
Peace River	37	238	1,870	1,907	240	2,147	1,847	229	13	4	47	7	1
Pincher Creek	22	208	1,502	1,524	210	1,734	1,468	202	27	3	29	5	1
Ponoka	18	206	1,750	1,768	211	1,979	1,709	205	28	5	31	1	1
Rocky Mountain House	13	142	1,085	1,108	145	1,253	1,062	137	12	7	14	1	1
Spirit River	28	266	1,720	1,738	268	1,998	1,689	249	21	7	38	6	2
St. Albert	34	266	2,159	2,195	268	2,463	2,159	249	43	4	44	4	3
St. Paul	39	411	3,090	3,129	417	3,546	3,092	287	4	4	48	5	3
Taber	23	110	1,470	1,493	113	1,606	1,458	110	32	1	21	2	4
Tofield	7	45	437	437	45	482	417	45	9	11	11	2	5
Trochu	28	77	1,292	1,320	78	1,398	1,291	72	6	2	23	4	3
Two Hills	42	171	2,378	2,420	171	2,591	2,345	163	26	3	43	5	2
Vegreville	19	168	1,577	1,596	174	1,770	1,548	169	18	1	30	4	3
Vermilion	22	115	1,261	1,283	115	1,398	1,251	110	14	1	18	4	3
Viking	15	116	1,455	1,470	119	1,589	1,431	115	13	1	26	1	1
Wainwright	21	259	1,797	1,797	260	2,057	1,764	255	14	2	19	2	2
Westlock	51	322	3,189	3,240	279	3,519	3,180	273	23	6	57	4	6
Wetaskiwin	46	322	2,593	2,639	331	2,970	2,531	318	57	7	51	7	6
Totals	1,201	134	73,036	74,237	8,912	83,149	72,002	8,612	915	136	1,320	164	116

30 - 89 BEDS	6	11,177	11,183	1,602	29	11,122	11,451	1,614	5.2	7.7	31	72.9	
Abnashca	1,388	7,900	10,482	721	1,168	1,209	11,150	721	10.7	6.8	29	64.8	
Barhead	887	14,628	15,526	1,654	940	11	14,479	15,430	7.5	6.5	42	70.9	
Barnmore		11,012	11,002	810			10,477	810	8.2	7.1	30	41.9	
Bonnyville St. Louis	798	9,276	10,600	1,154	552	822	10,477	10,722	9.0	7.2	29	53.9	
Brooks	526	13,589	13,585	1,640	6		13,621	13,627	6.6	8.1	13	28.4	
Calgary Grace	294	3,288	4,662	5,387	294	1,083	3,304	4,681	5.388	6.3	27	57.9	
Chadburn	2,855	3,512	8,851	1,074	2,384	2,589	4,043	9,026	1,085	7.9	27	34.3	
Cidabury	17	9,826	9,843	1,094	24	105	9,826	9,806	6.3	6.7	26	69.6	
Edson	278	9,024	9,406	1,780	296		8,951	9,352	1,085	7.5	26	86.6	
Elk Point		16,117	16,117	1,129			16,209	16,209	1,233	7.3	44	96.5	
Fairview		11,270	11,270	1,356			11,396	11,396	7.1	8.0	31	100.7	
Fort Macleod		7,231	7,231	841			10,641	10,610	581	6.3	26	81.4	
Fort Vermilion		9,505	9,505	673			9,543	9,510	631	7.5	20	100.7	
Galahad	147	9,469	9,617	581	139	8	9,483	9,410	581	7.0	26	65.9	
Grande Prairie		24,656	24,656	3,099			24,683	24,683	3,101	7.5	68	97.9	
Hanna		12,859	12,859	1,501			12,591	12,591	1,461	8.4	35	83.9	
High Prairie	550	17,440	18,418	1,861	433	523	17,610	18,566	1,877	7.1	60	123.1	
High River		14,024	14,024	2,323			13,443	14,010	1,536	7.9	38	87.3	
Lacombe	1,209	13,175	14,384	1,558	1,140		17,969	17,988	1,561	7.0	39	78.8	
Lac La Biche	25	18,920	18,920	1,693	495	7	13,591	14,093	1,622	10.5	39	92.8	
Lloydminster	402	13,671	13,671	1,643	18		15,685	18,440	1,819	8.4	49	92.4	
Lyndhurst	329	9,827	9,827	1,818	2,413		9,947	10,100	1,290	7.1	28	67.2	
Molden	224	10,521	10,521	1,296	133		15,105	15,105	2,001	8.1	8.6	42	113.6
Olds		15,341	15,341	2,021			11,799	13,850	1,445	9.3	20	44.9	
Peace River		10,495	10,495	1,453	1,321	730	10,954	10,954	1,426	6.3	31	63.6	
Pincher Creek	875	8,376	11,147	1,424			7,217	7,367	932	6.7	20	56.5	
Ponoka		7,046	7,214	920	121	29	16,756	16,756	1,785	8.3	40	91.3	
Rocky Mountain House	144	11,147	14,662	1,161	571	2,868	10,739	14,178	1,152	8.4	41	83.4	
Spirit River	2,529	11,369	17,055	1,772			13,237	14,397	2,498	6.9	47	107.6	
Stettler	558	13,390	14,527	2,517	543	617	13,237	14,397	2,498	6.9	47	107.6	
St. Paul		20,360	20,378	3,036	18		9,315	9,315	808	6.3	36	84.1	
Tofield	18	9,439	9,439	804			9,315	9,315	808	6.3	36	84.1	
Trechu	987	2,958	4,309	418	649	349	3,007	4,005	418	3.4	12	62.4	
Two Hills		7,952	7,952	623			7,876	7,876	611	8.3	22	62.4	
Vegreville	2,339	13,177	19,824	1,392	2,228	4,426	13,113	19,761	1,349	8.1	54	83.9	
Vermilion		9,993	9,993	1,323			10,953	10,953	1,349	7.9	27	50.7	
Viking		8,005	8,005	1,027			7,903	7,903	1,004	6.5	22	59.2	
Vulcan		7,997	7,997	910			12,884	12,902	7.8	7.8	22	59.2	
Wainwright	5	13,022	13,027	1,743	18		12,884	12,902	1,742	7.3	36	74.4	
Westlock	2,639	19,192	22,875	2,348		2,692	18,881	22,491	2,339	7.1	63	83.6	
Wetaskiwin	787	302	15,944	2,187	836	275	14,739	15,840	2,182	6.1	44	72.8	
Totals	16,376	20,843	496,447	533,666	65,020	20,766	503,279	539,692	64,816	7.4	1,462	73.7	

TABLE 33—PATIENT DAYS AND AVERAGE LENGTH OF STAY IN ALBERTA APPROVED HOSPITALS DURING 1958 (Continued)

Hospitals	Patient Days of Patients Hospitalized During 1958				Patient Days of Separated Patients During 1958				Average Stay of Separated Patients During 1958		Average number of Adults and Children in Hospital Daily	Occupancy (Based on Rated Bed Capacity) *
	Adults and Children				Adults and Children				Children and Adults	Newborn		
	Private	Semi-Private	Standard Ward	Total	Private	Semi-Private	Standard Ward	Total				
90 - 179 BEDS												
Calgary Crippled Children's												
Camrose	3,043	4,275	24,518	3,236	2,967	4,085	29,268	3,197	65.8	7.1	8.5	67
Drumheller	4,325	4,169	18,652	2,177	5,049	4,101	19,754	26,806	7.1	8.5	7.2	76
Lamont	1,144	4,300	20,139	1,135	1,151	4,285	17,863	2,178	9.8	7.2	8.1	51
Red Deer			31,991	5,967			20,586	1,137	7.8	8.1	7.4	55
							32,062	5,978	6.5			88
Totals	8,512	12,744	101,604	122,860	9,167	12,471	104,947	126,585	12,490	9.3	7.7	337
62.0												
180 BEDS AND OVER												
Calgary General	9,054	45,284	161,503	215,841	8,605	43,569	160,904	213,078	30,335	9.4	6.1	596
(a) Psychiatric			1,553				1,772		12.1			
Calgary Holy Cross	11,099	17,510	78,204	106,813	10,767	17,435	78,254	106,456	8.6	6.9	293	87.2
Edmonton General	10,431	21,597	95,578	127,606	10,408	21,223	94,822	126,453	17,349	8.9	7.4	350
Edmonton Misericordia	3,175	27,537	82,708	113,416	3,245	29,766	80,465	113,476	17,782	9.1	8.3	311
Edmonton Royal Alexandra	9,797	27,311	168,279	205,387	11,061	29,757	166,965	207,783	42,057	9.1	7.7	563
Edmonton University	11,783	41,511	184,323	237,617	11,623	40,219	176,467	228,309	16,783	13.0	8.6	781
(a) D.V.A.	182	414	32,137	32,733	137	296	22,795		12.7			
(b) Polo	5	42	13,659	13,706	37	11	6,979		51.3			
(c) Psychiatric	3	11	1,058	1,072	5	11	1,121	1,169	14.6			
Lethbridge Municipal	4,416	9,701	45,259	59,376	4,347	9,598	45,120	59,065	7,377	9.7	8.0	162
Lethbridge St. Michael's	6,492	20,249	31,714	58,455	5,938	19,558	32,560	58,056	4,166	9.7	8.1	160
Medicine Hat	2,530	4,506	38,055	45,091	2,644	4,575	38,029	45,248	6,230	8.5	7.2	124
50.8												
Totals	68,967	215,669	934,030	1,218,666	68,817	216,018	905,804	1,190,639	158,681	9.8	7.4	3,339
83.6												
Total Approved Hospitals	97,258	250,799	1,736,065	2,084,122	97,104	250,823	1,721,527	2,069,454	262,719	8.6	7.4	5,710
77.8												

* Adjustments made for changes in rated capacity during year.

TABLE 34

CASES AND DAYS OF SEPARATED PATIENTS BY DAYS OF STAY;
SEX; SIZE OF HOSPITAL, 1958

(EXCLUDING D.V.A. DIVISION UNIVERSITY HOSPITAL, AND NEWBORN)

Length of Stay by Days	CASES						
	Total During Year	Sex		Size Hospital by Rated Bed Capacity			
		Male	Female	1 - 29	30 - 89	90 - 179	180 and Over
1	20,010	9,582	10,428	4,233	7,906	1,932	5,939
2	29,606	13,642	15,964	4,578	9,420	1,894	13,714
3	23,583	10,243	13,340	3,820	8,028	1,439	10,296
4	20,493	8,643	11,850	3,216	6,637	1,147	9,493
5	20,696	7,425	13,271	2,720	6,214	974	10,788
6	20,777	6,094	14,683	2,537	6,024	982	11,234
7	20,641	5,801	14,840	2,457	6,319	978	10,887
8	15,199	4,707	10,492	1,857	4,844	884	7,614
9	10,735	3,877	6,858	1,339	3,372	610	5,414
10	8,218	3,260	4,958	1,070	2,514	415	4,219
11 - 14	19,391	8,384	11,007	2,114	5,219	874	11,184
15 - 19	11,225	5,416	5,809	923	2,752	500	7,050
20 - 29	9,107	4,782	4,325	641	2,007	387	6,072
30 - 59	6,301	3,415	2,886	430	1,264	324	4,283
60 - 89	1,177	676	501	83	228	100	766
90 and over	968	553	415	76	169	142	581
Total	238,127	96,500	141,627	32,094	72,917	13,582	119,534

DAYS							
1	20,010	9,582	10,428	4,233	7,906	1,932	5,939
2	59,212	27,284	31,928	9,156	18,840	3,788	27,428
3	70,749	30,729	40,020	11,460	24,084	4,317	30,888
4	81,972	34,572	47,400	12,864	26,548	4,588	37,972
5	103,480	37,125	66,355	13,600	31,070	4,870	53,940
6	124,662	36,564	88,098	15,222	36,144	5,892	67,404
7	144,487	40,607	103,880	17,199	44,233	6,846	76,209
8	121,592	37,656	83,936	14,856	38,752	7,072	60,912
9	96,615	34,893	61,722	12,051	30,348	5,490	48,726
10	82,180	32,600	49,580	10,700	25,140	4,150	42,190
11 - 14	237,725	103,167	134,558	25,691	63,602	10,683	137,749
15 - 19	187,607	90,624	96,983	15,317	46,025	8,354	117,911
20 - 29	215,186	113,408	101,788	14,861	47,416	9,209	143,610
30 - 59	249,112	134,659	114,453	17,005	49,549	12,903	169,655
60 - 89	84,080	48,252	35,828	5,849	16,464	7,204	54,563
90 and over	171,902	99,791	72,111	16,296	33,571	29,287	92,748
Total	2,050,581	911,513	1,139,068	216,460	539,692	126,585	1,167,844

TABLE 35—HOSPITAL CASES AND DAYS BY LENGTH OF STAY AND AGE, 1958
(EXCLUDING D.V.A. DIVISION OF THE UNIVERSITY HOSPITAL, AND NEWBORN)

PATIENT AGE	LENGTH OF STAY IN DAYS																90 +
	Total	1	2	3	4	5	6	7	8	9	10	11-14	15-19	20-29	30-59	60-89	
CASES																	
0-1	9,223	6,407	7,338	9,007	9,999	9,771	8,511	7,331	5,577	4,611	3,488	899	492	357	210	44	18
1-4	18,311	2,121	4,132	2,427	2,427	1,658	1,236	1,035	782	531	386	386	893	312	201	20	36
5-9	17,174	2,122	5,899	2,436	1,471	1,111	884	706	519	388	275	610	288	219	145	53	48
10-19	25,038	2,965	4,285	3,214	2,457	2,315	2,158	2,141	1,412	899	641	1,188	535	359	300	74	95
20-29	48,399	3,901	4,458	4,201	4,094	5,511	6,679	6,748	4,495	2,431	1,498	2,361	927	606	360	69	60
30-39	35,256	2,862	3,517	3,437	2,979	3,272	3,768	3,906	2,925	1,870	1,375	2,683	1,240	823	470	64	65
40-44	11,921	1,010	1,392	1,339	1,000	913	863	834	701	594	469	1,309	681	452	298	35	31
45-49	10,801	922	1,076	1,226	990	865	630	659	588	498	481	1,181	741	541	325	37	33
50-54	10,112	753	986	983	920	739	672	614	520	476	397	1,174	750	650	392	45	41
55-59	9,119	613	754	824	760	610	539	587	481	469	381	1,135	743	643	436	62	47
60-64	8,571	508	623	621	633	607	515	488	461	416	408	1,160	790	697	481	93	70
65-69	9,512	502	574	583	656	634	542	627	500	504	441	1,307	940	879	621	119	83
70-74	9,798	450	490	591	627	609	525	661	494	486	446	1,394	1,050	973	758	152	92
75+	14,407	581	646	754	827	835	845	869	735	693	630	2,061	1,549	1,568	1,286	284	244
No Age	485	60	36	40	33	46	50	35	29	19	24	36	20	28	18	6	5
Total	238,127	20,010	29,606	23,583	20,493	20,696	20,777	20,641	15,199	10,735	8,218	19,391	11,225	9,107	6,301	1,177	968
DAYS																	
0-1	77,346	640	1,476	2,721	3,996	4,855	5,106	5,117	4,456	4,149	3,480	10,976	8,227	8,282	8,135	3,247	2,483
1-4	107,190	2,121	8,264	7,281	8,188	8,290	7,416	7,245	6,256	4,779	3,860	10,830	7,918	7,321	8,032	2,778	6,611
5-9	92,201	2,122	11,798	7,308	5,884	5,555	5,304	4,942	4,152	3,492	2,750	7,393	4,830	5,144	5,905	3,777	11,845
10-19	163,054	2,965	8,570	9,642	9,828	11,575	12,948	14,987	11,286	8,091	6,410	14,471	8,917	8,456	12,089	5,244	17,565
20-29	321,623	3,901	8,316	12,603	16,376	27,555	40,074	27,342	35,960	21,879	14,980	28,484	15,379	14,248	14,151	4,956	14,935
30-39	267,164	2,862	7,034	10,311	11,916	16,360	22,608	27,342	23,400	16,830	13,750	32,765	50,556	19,370	18,285	4,614	9,151
40-44	107,052	1,010	2,154	3,017	3,000	4,365	3,178	3,838	3,400	4,482	4,890	14,511	12,408	12,686	12,643	2,656	4,642
45-49	97,952	920	1,972	2,942	3,680	3,865	3,760	4,613	4,160	4,284	3,970	14,469	12,554	15,433	15,607	3,182	5,474
50-54	100,760	753	1,972	2,942	3,680	3,865	3,760	4,613	4,160	4,284	3,970	14,469	12,554	15,433	15,607	3,182	5,474
55-59	108,214	613	1,246	1,863	2,532	3,095	3,090	3,416	3,688	4,741	3,610	13,591	12,512	15,197	18,966	4,528	7,641
60-64	129,558	508	1,246	1,863	2,532	3,095	3,090	3,416	3,688	4,741	3,610	13,591	12,512	15,197	18,966	4,528	7,641
65-69	148,704	502	1,148	1,749	2,624	3,170	3,252	4,359	4,000	4,336	4,410	16,391	13,718	20,553	20,553	8,574	11,390
70-74	144,704	581	980	1,773	2,508	3,045	3,150	4,627	3,952	4,374	4,460	17,281	17,552	23,953	30,569	10,724	18,626
75+	247,020	581	1,292	2,262	3,308	4,175	5,070	6,083	5,880	6,237	6,300	25,470	26,093	37,190	51,168	20,470	45,433
No Age	5,041	60	72	120	132	230	300	245	232	171	240	440	339	694	671	429	666
TOTAL	2,050,581	20,010	59,212	70,749	81,972	103,480	124,662	144,487	121,592	96,615	82,180	237,725	187,607	215,196	249,112	84,080	171,902

TABLE 36—MOVEMENT OF PATIENTS, HOSPITAL DAYS, AVERAGE LENGTH OF STAY, AND AVERAGE IN HOSPITAL DAILY BY MONTH AND HOSPITAL, 1958
(EXCLUDING D.V.A. DIVISION OF THE UNIVERSITY HOSPITAL, AND NEWBORN)

Month and Size of Hospital	PATIENTS					DAYS			Average Length of Stay of Patients	Average Days of Care During 1958
	In at the Beginning	Admissions	Total Under Care	Discharges	Deaths	In at the End	Days of Care During 1958	Days for Separated Patients		
1 - 29 BEDS										
January	544	2,760	3,304	2,694	21	589	18,926	17,922	611	5.7
February	589	2,395	2,984	2,342	21	621	16,726	16,726	597	5.6
March	621	2,696	3,317	2,717	25	575	19,050	18,830	615	5.7
April	575	2,722	3,297	2,680	31	586	18,312	23,366	610	3.6
May	586	2,657	3,243	2,693	36	514	17,779	19,816	574	3.3
June	514	2,550	3,064	2,506	22	536	16,367	15,942	546	3.2
July	536	2,704	3,240	2,662	28	550	16,604	16,479	539	3.1
August	550	2,703	3,253	2,723	26	504	16,467	16,467	539	3.1
September	504	2,663	3,167	2,589	28	350	18,473	16,867	549	5.2
October	550	2,736	3,286	2,629	28	329	19,473	16,867	596	5.6
November	629	2,747	3,376	2,759	33	564	19,134	19,561	638	5.7
December	584	2,779	3,363	2,766	35	562	17,878	18,753	577	5.3
Year	544	32,112	32,656	31,760	334	562	212,193	216,468	581	6.5
30 - 89 BEDS										
January	1,201	6,485	7,686	5,983	63	1,625	49,477	44,076	1,596	6.4
February	1,625	5,797	7,422	5,728	74	1,620	45,306	44,076	1,588	6.1
March	1,620	6,273	7,893	6,271	81	1,541	49,252	47,854	1,589	6.2
April	1,541	6,428	7,969	6,381	74	1,514	48,192	47,854	1,575	5.7
May	1,514	6,115	7,629	6,227	89	1,368	41,996	42,382	1,458	5.9
June	1,313	5,945	7,258	5,887	72	1,316	40,931	42,382	1,400	5.8
July	1,305	6,139	7,444	6,016	72	1,204	41,308	42,038	1,320	5.5
August	1,316	6,237	7,553	6,066	66	1,436	40,935	39,635	1,333	5.5
September	1,204	5,813	7,017	5,518	65	1,416	44,949	46,439	1,364	5.8
October	1,436	6,162	7,598	6,116	86	1,416	44,949	46,439	1,450	5.9
November	1,416	5,848	7,265	5,811	77	1,477	45,606	42,816	1,520	6.2
December	1,477	5,673	7,150	5,733	97	1,320	43,260	45,950	1,395	6.1
Year	1,201	73,036	74,237	72,002	915	1,320	533,666	539,692	1,462	7.4

TABLE 36.—MOVEMENT OF PATIENTS, HOSPITAL DAYS, AVERAGE LENGTH OF STAY, AND AVERAGE IN HOSPITAL DAILY BY MONTH AND HOSPITAL, 1958 (Continued)
(EXCLUDING D.V.A. DIVISION OF THE UNIVERSITY HOSPITAL, AND NEWBORN)

Month and Size of Hospital	PATIENTS					DAYS		Average Length of Stay of Patients	Average Days Per Patient During 1958
	In at the Beginning	Admissions	Total Under Care	Discharges	Deaths	In at the End	Days of Care During 1958		
90 - 179 BEDS									
January	287	1,236	1,523	1,155	14	354	10,591	8,026	6.9
February	354	1,016	1,370	988	20	362	10,220	10,168	7.0
March	362	1,173	1,535	1,145	24	366	11,318	12,254	7.4
April	366	1,242	1,608	1,242	14	352	11,029	10,452	8.3
May	352	1,167	1,519	1,159	27	333	10,951	9,141	7.7
June	333	1,100	1,433	1,104	15	314	10,266	14,924	13.3
July	314	1,159	1,473	1,162	12	320	9,666	10,294	7.2
August	320	1,114	1,434	1,162	13	259	9,310	11,940	6.6
September	259	996	1,255	919	23	316	9,081	8,403	18.2
October	316	1,081	1,397	1,093	13	291	10,110	9,997	7.2
November	291	1,136	1,427	1,064	18	345	10,345	9,158	8.5
December	345	1,194	1,539	1,204	16	319	9,973	11,828	9.7
Year	287	13,614	13,901	13,376	206	319	122,860	126,585	337
180 BEDS AND OVER									
January	2,548	10,150	12,698	9,313	178	3,207	98,271	88,995	9.4
February	3,207	9,072	12,279	8,864	179	3,236	91,340	88,316	7.7
March	3,236	10,192	13,428	9,768	182	3,245	99,937	102,036	7.4
April	3,245	10,056	13,301	9,768	207	3,326	96,480	96,644	9.8
May	3,326	10,141	13,467	10,219	189	3,059	100,042	101,991	7.4
June	3,059	10,016	13,185	9,878	180	3,077	97,258	95,902	9.5
July	3,077	10,056	13,583	10,088	184	3,261	98,753	96,726	7.4
August	3,261	9,927	13,188	10,175	196	2,817	97,880	98,110	9.5
September	2,817	10,358	13,175	9,655	186	3,334	98,756	92,784	7.5
October	3,334	10,328	13,662	10,056	192	3,414	104,768	102,130	7.7
November	3,414	9,662	13,076	9,506	204	3,366	104,012	100,267	8.0
December	3,366	9,550	12,916	9,727	207	2,982	98,394	103,943	7.6
Year	2,548	119,963	122,516	117,250	2,284	2,982	1,185,933	1,167,844	9.8
All Hospitals									
January	4,580	20,631	25,211	19,155	281	5,775	177,265	159,019	8.2
February	5,775	18,031	24,055	17,922	281	5,775	163,392	159,409	7.0
March	5,775	20,334	26,173	19,155	312	5,778	179,617	188,743	6.8
April	5,839	20,440	26,175	20,071	326	5,778	171,275	178,516	6.9
May	5,778	20,080	25,858	20,298	341	5,219	173,964	177,265	6.7
June	5,219	19,671	24,890	19,375	283	5,232	165,887	169,150	6.7
July	5,232	20,458	25,690	19,947	296	5,447	165,938	165,643	6.5
August	5,447	19,981	25,428	20,343	301	4,784	164,955	168,683	6.5
September	4,784	19,830	24,614	18,679	289	5,636	165,249	156,789	6.7
October	5,636	20,327	25,963	19,894	319	5,750	178,300	175,259	6.9
November	5,750	19,494	25,244	19,140	332	5,772	179,097	171,802	8.7
December	5,772	19,196	24,968	19,430	355	5,183	169,505	180,474	8.8
Year	4,580	238,730	243,310	224,388	3,739	5,183	2,054,652	2,050,581	9.1
Year									8.6
Year									8.4

TABLE 37

MONTHLY MOVEMENT OF NEWBORN PATIENTS, 1958
(Including Contract Hospitals)

Month	Live Births	Total Under Care	Discharges	Deaths	Stillbirths	Days of Care During 1958	Days of Separated* Patients	Average in Hospital Daily
January	2,823	3,491	2,726	43	35	21,614	20,753	697
February	2,638	3,360	2,536	40	30	20,307	19,958	725
March	3,089	3,883	3,083	39	36	23,059	23,235	744
April	3,006	3,767	2,981	26	27	22,280	22,230	743
May	3,166	3,926	3,140	43	26	23,160	23,583	747
June	3,031	3,774	2,960	57	32	22,190	21,839	740
July	2,890	3,647	2,887	54	37	21,151	21,673	682
August	2,886	3,592	2,853	38	31	21,266	21,122	686
September	3,068	3,769	2,990	34	29	22,780	22,417	759
October	3,080	3,825	3,033	41	30	22,910	22,911	739
November	2,970	3,721	2,856	44	31	22,341	22,604	745
December	2,922	3,643	2,944	43	34	21,481	21,851	692
Year	35,619	36,247	35,089	502	378	264,539	264,176	725

*Discharged or Died.

TABLE 38—OPERATING EXPENDITURES YEAR 1958

Hospitals	DIRECT EXPENDITURES										Interest on Current Loan	Other Expense	Net Expenditure	Depreciation	Long Term Loans	Gross Expenditure
	Salaries and Wages	Medical, Surgical, and Supplies	Drugs, Medicine and Prescriptions	General Administration	Professional Care of Patients	General Services†	Physical Plant									
1 - 29 BEDS																
Bassano	49,961	3,097	6,268	2,739	2,451	9,808	4,417	.....	.....	85	78,826	3,184	7,051	89,061
Bassano	38,975	2,342	4,409	1,834	803	5,217	10,011	.....	.....	124	63,715	11,610	4,609	78,934
Beaverledge	31,186	2,158	1,118	1,933	2,953	5,285	5,567	86	.....	481	50,334	6,933	.....	58,163
Bentley	32,420	2,156	3,518	2,786	861	6,141	5,753	.....	.....	150	53,785	9,502	.....	63,287
Berwyn	1,803	1,803	2,180	1,063	694	1,875	2,487	.....	.....	634	39,470	2,702	.....	42,172
Bonnyville K.H.P.	19,887	.....	.....	2,689	1,973	3,657	945	43	.....	1,800	30,994	1,119	.....	31,113
Cammore*	17,852	8,074	9,619	2,689	.....	14,775	4,102	48	.....	1,800	30,994	4,284	18,145	136,766
Cardston	26,845	261	3,715	2,579	253	3,194	2,745	.....	.....	63	39,655	.....	2,431	42,086
Carmangay	74,395	2,692	2,397	4,076	1,187	5,142	10,421	.....	.....	864	102,174	4,442	1,500	108,112
Castor	26,845	1,626	2,791	2,424	968	1,987	4,939	2	.....	969	43,731	4,636	60	48,427	
Cereal	28,025	2,537	3,860	1,298	6,021	5,888	2,730	.....	.....	355	51,622	7,237	.....	58,859
Coaldale	28,933	2,537	3,860	1,298	6,021	5,888	2,730	.....	.....	355	51,622	7,237	.....	58,859
Cold Lake	43,015	2,157	4,088	1,886	1,461	6,508	9,914	.....	.....	136	65,165	7,592	4,074	76,331
Consort	38,362	3,810	3,188	2,467	6,690	3,677	8,241	.....	.....	60	60,435	6,772	1,094	68,301
Coronation	25,908	7,424	1,776	2,630	5,468	5,830	4,868	.....	.....	.....	53,304	3,091	.....	56,995
Coyland	48,046	1,561	7,539	3,511	1,643	10,235	4,624	.....	.....	.....	77,159	7,188	.....	84,347
Devon	35,616	.....	.....	1,076	6,128	5,204	4,007	10	.....	.....	52,041	.....	.....	52,041
Drayton Valley**	30,485	1,835	3,716	3,745	3,275	2,821	2,183	749	.....	40	48,809	5,640	9,640	64,089	
Duckville	48,380	1,236	2,285	2,980	1,986	9,081	6,787	510	.....	.....	73,285	10,377	1,378	85,040
Edmore	28,466	1,302	2,035	1,761	571	6,805	7,179	.....	.....	11	44,130	4,206	1,037	49,373
Empress	31,987	1,754	2,539	3,772	310	6,198	5,408	.....	.....	204	52,172	4,062	.....	56,234
Ft. McMurray	46,664	1,021	1,477	2,618	669	7,614	7,634	.....	.....	25	67,722	4,579	3,305	75,606
Gleadow	28,848	876	2,372	2,857	900	4,150	4,471	458	.....	.....	44,932	6,340	3,358	54,630
Hardisty	33,737	2,084	2,727	2,882	2,274	9,028	5,712	.....	.....	.....	78,444	1,683	211	84,545
Hythe	1,778	.....	.....	5,762	4,70	3,810	1,942	92	.....	48	116,141	9,302	.....	125,443
Innisfail	72,893	8,154	1,891	2,308	4,649	12,346	7,921	542	.....	.....	41,959	2,431	.....	86,356
Islay	25,613	.....	.....	2,322	322	6,279	4,882	.....	.....	9	78,791	6,819	746	86,356
Jasper	48,416	1,955	3,767	2,303	2,158	8,572	6,653	.....	.....	325	97,548	7,412	.....	104,960
Killam	66,907	1,252	8,283	4,136	2,226	7,766	6,653	.....	.....	135	70,086	5,140	2,798	78,024
Knappath	35,794	2,309	4,469	4,978	7,344	8,717	6,340	64	.....	3,244	46,597	5,593	.....	52,028
Manning	33,905	2,616	1,377	4,978	1,430	6,016	9,462	.....	.....	.....	93,930	5,940	2,503	102,373
Mannville	28,366	617	3,206	2,349	2,256	6,567	3,236	1,004	.....	172	33,949	4,176	2,549	40,971	
Mayerthorpe	60,816	4,034	4,340	4,307	2,368	11,191	5,698	.....	.....	.....	52,054	4,906	3,147	56,964
Mercer	22,121	594	2,122	2,122	939	5,155	2,670	.....	.....	.....	64,645	12,845	3,437	80,637
Mundare	38,875	350	638	2,712	899	3,129	5,451	.....	.....	103	57,142	3,534	3,862	109,981
Mynnam	37,160	2,322	2,636	3,401	3,162	7,991	7,973	.....	.....	184	67,289	8,830	66,681	133,674
Oyen	35,263	2,612	3,588	3,495	28	2,772	9,900	1	.....	230	68,269	2,991	445	71,705	
Provost	66,575	2,786	3,765	3,466	3,344	7,946	9,223	.....	.....	38	120,909	9,272	3,493	133,674
Roadway	44,107	889	2,087	2,855	1,823	6,859	5,311	.....	.....	274	47,093	2,971	719	49,731
Rimby	36,167	4,922	5,418	2,582	3,556	9,254	6,136	3	.....	36	78,820	10,418	2,181	100,419	
Rimby	65,895	3,573	1,839	2,582	15,259	17,983	10,388	1,378	.....	351	79,901	4,402	53	84,356	
Smoky Lake	27,371	2,328	1,776	2,780	1,561	5,968	3,657	.....	.....	.....	57,562	4,638	.....	62,200
Three Hills	58,041	3,313	4,582	3,157	1,706	9,810	7,357	.....	.....	.....	.....	.....	.....	.....
Turner Valley	48,547	3,311	4,214	4,414	1,586	10,168	7,257	53	.....	.....	.....	.....	.....	.....
Vilna	36,490	605	1,785	2,538	858	2,621	3,673	.....	.....	.....	.....	.....	.....	.....
Willington	42,537	454	1,412	3,154	1,779	3,223	5,003	.....	.....	.....	.....	.....	.....	.....
Total	1,840,964	102,269	139,620	133,415	104,262	304,263	258,358	5,082	10,864	2,899,097	249,422	81,722	3,230,241			

30 - 89 BEDS	72,382	2,154	7,645	3,997	3,476	17,466	8,982	460	3	116,559	12,640	6,007	135,206
Atabasca	121,925	11,508	2,900	5,037	3,917	14,152	12,612	387	2,498	172,438	29,442	32,644	234,524
Bathurst	98,979	4,002	7,964	7,024	3,784	16,112	11,560			151,923	32,353	32,353	199,634
Blainville	111,288	3,012	9,695	4,640	5,845	19,057	13,454			166,483	17,053	17,497	191,033
Bonnyville St. Louis	86,671	489	6,691	5,790	6,732	12,393	12,393			122,629	16,445	1,401	140,475
Brooks	120,929			7,379	27,292	28,595	12,382			196,881	10,213	5,806	137,938
Brooks	72,344	4,162	2,027	3,747	145	11,358	12,062			106,620	31,316		146,061
Calgary Grace	98,621	8,813		2,944	3,245	16,405	12,265			156,124	9,574	1,912	173,350
Calgary	94,302	8,286		2,944	3,543	16,405	12,265	1,354		156,124	6,307	1,912	173,350
Edmonton	72,093	1,945	10,748	2,959	2,118	17,029	13,293			178,248	14,671	5,514	198,433
Edmonton	116,757	3,569	10,748	2,959	2,118	17,029	13,293			178,248	14,671	5,514	198,433
Elk Point	79,279	7,227	5,533	6,070	10,382	16,916	11,849	245		137,601	11,833		149,434
Farview	68,782	3,869	8,034	4,220	2,188	23,021	13,572			116,640	8,473	676	125,789
Ft. Macleod	48,925	2,102	3,402	3,803	1,889	9,598	6,354			81,391	10,216	2,594	94,201
Ft. Vermilion	70,944	3,025	7,343	3,650	1,854	13,712	9,675			109,333	12,334	4,537	126,204
Galadab	194,481	14,573	24,734	12,650	25,193	31,785	21,767	593		327,444	12,923	34,013	374,380
Grande Prairie	125,632	7,446	11,187	10,985	5,038	16,558	11,841			210,857	4,000	6,061	220,918
Hanna	134,241	5,772	12,134	10,214	5,038	16,558	11,841			191,151	14,378	2,186	200,731
High Prairie	120,521	6,257	12,134	10,214	5,038	16,558	11,841			183,334	19,086	2,777	199,752
High River	124,940	9,128	7,754	7,320	7,756	19,144	10,294	199		163,959	21,460	16,765	180,735
Lacombe	99,131	6,257	7,754	7,320	7,756	19,144	10,294			198,838	19,086	16,765	200,735
Lac La Biche	94,559	5,095	7,030	9,218	4,451	12,363	29,532			140,367	16,491	7,799	167,371
McLennan	183,398	2,846	10,880	6,674	5,534	16,048	10,595	36		182,350	18,392		199,821
Olds	109,145	5,095	7,030	9,218	4,451	12,363	29,532	363		140,367	16,491		156,821
Peace River	106,735	3,883	9,751	7,507	4,428	11,009	16,100			187,879	20,920	6,142	175,739
Pincher Creek	107,702	3,400	6,979	7,179	6,115	12,642	10,570			187,879	20,920	6,142	175,739
Ponoka	53,084	1,401	2,635	3,881	2,895	7,505	10,285			81,806	10,969	4,478	96,383
Rocky Mountain House	104,587	4,225	9,642	6,332	1,370	12,474	18,817			157,981	25,385	12,254	195,590
Spirit River	146,913	4,325	3,181	5,506	30,945	16,645	10,275	7		217,960	9,951	5,564	232,475
Stettler	130,840	2,694	7,385	7,589	11,468	31,166	13,804			179,467	15,708	988	196,163
St. Paul	167,932	18,862	20,297	7,589	11,468	31,166	13,804			217,960	15,708	988	196,163
Taber	63,968	7,302	10,217	5,145	5,012	13,081	7,118	1,092		111,935	9,156	2,100	126,318
Trochu	591	2,680	2,680	1,520	1,771	6,315	7,919			65,171	9,156	3,699	76,427
Trochu	60,017	1,905	4,334	3,850	4,102	8,523	9,219			93,353	8,600	105,652	280,135
Two Hills	177,791	5,621	23,141	9,492	10,927	14,530	14,530			257,125	23,010	7,623	300,135
Vegreville	80,026	7,104	2,735	7,862	2,331	10,937	11,050			121,974	17,836	3,908	147,433
Vermilion	82,754	2,713	3,422	6,853	15,105	9,637	8,457			128,702	15,031	1,462	112,272
Viking	61,535	2,652	3,724	5,797	3,913	11,655	11,374			100,817	9,993	7,017	193,434
Vulcan	104,371	7,216	12,529	9,224	12,423	14,947	9,966			169,919	16,498	1,786	187,157
Wainwright	130,152	2,984	15,196	5,349	12,723	19,730	9,382			166,836	26,195		193,031
Westlock	113,148	8,980	10,639	4,888	2,975	19,495	6,707			166,836	14,775		181,607
Wetaskiwin													
Total	4,188,329	204,608	338,771	256,153	287,055	632,856	518,656	4,753	12,062	6,443,243	628,365	246,491	7,318,089

TABLE 38—OPERATING EXPENDITURES YEAR 1958 (Continued)

Hospitals	Salaries and Wages	Medical, Surgical and Sterile Supplies	Drugs, Medicine and Prescriptions	DIRECT EXPENDITURE				Interest on Current Loan	Other Expense	Net Expenditure	Depreciation	Interest on Long Term Loans	Gross Expenditure
				General Administration	Care of Patients	General Services†	Physical Plant						
90 - 179 BEDS													
Calgary Crippled Children's	341,839	9,056	5,161	12,739	5,697	28,944	18,225	1,209	8	421,661	31,095	8,442	421,661
Calgary General	333,345	10,811	23,612	12,634	13,856	31,693	24,416	1,209	8	431,654	31,095	8,442	471,191
Drumheller	199,574	10,882	9,202	14,066	16,544	37,471	19,868	.....	64	307,711	21,959	5,004	334,674
Lamont	130,335	9,192	8,614	13,991	11,616	33,533	20,054	.....	749	288,084	13,464	2,139	303,687
Red Deer	338,081	18,469	34,269	18,116	18,024	42,858	19,260	.....	1,134	510,211	30,198	12,526	552,935
Total	1,403,114	58,580	80,858	71,546	65,737	174,499	101,823	1,209	1,955	1,959,321	96,716	28,111	2,084,148
180 BEDS AND OVER													
Calgary General	3,297,096	246,684	133,945	160,124	180,423	472,926	123,284	.....	1,391	4,615,823	136,446	12,465	4,615,823
Calgary Holy Cross	1,532,353	107,795	113,182	67,294	65,606	139,029	78,427	.....	1,978	2,105,664	136,446	90,191	2,254,575
Edmonton General	1,568,675	92,151	106,504	61,452	57,740	118,921	76,652	.....	270	2,082,365	155,132	30,209	2,327,688
Edmonton Metropolitan	1,458,075	74,547	106,368	73,434	72,815	74,142	79,509	.....	42,330	1,981,220	87,640	30,209	2,099,069
Edmonton University*	2,510,371	138,937	177,811	161,673	130,325	457,305	127,409	.....	2,517	3,726,348	107,526	151,909	3,985,783
Lethbridge General	2,758,769	233,363	162,813	133,726	233,501	339,862	198,158	.....	353	3,878,005	132,182	222,782	4,100,787
Lethbridge Municipal	59,890	73,486	28,666	28,666	76,010	143,470	40,155	11,243	12,826	1,190,598	61,844	91,857	1,414,637
Lethbridge St. Michael's	615,287	38,192	73,486	31,278	54,279	80,185	27,992	803	1,095	879,056	61,844	13,055	953,955
Medicine Hat	611,901	28,688	31,461	26,463	54,226	72,914	34,118	3,954	158	863,913	130,556	96,053	1,090,522
Total	14,923,739	1,023,050	943,762	744,140	924,925	1,898,754	785,704	16,000	62,918	21,322,992	811,326	708,521	22,842,839
GRAND TOTAL	22,856,146	1,388,507	1,503,011	1,205,254	1,381,979	3,010,372	1,664,663	27,044	87,677	32,624,653	1,785,829	1,064,485	35,475,327

* April to December

** August to December

† Excluding perquisites. See Table 40

TABLE 39—EXPENDITURE ON GENERAL ADMINISTRATION AND PROFESSIONAL CARE OF PATIENTS 1958

Hospital	PROFESSIONAL CARE OF PATIENTS 1958												
	General Administration	Operating Room	Delivery Room	Pharmacy	Medical and Surgery	Laboratory	Diagnosis and Radiology	Radio Therapy	Physio-therapy	Nursing—Direct Care of Patients	Medical Records and Library	Emergency Unit	Others*
1 - 29 BEDS													
Bassano	8,642	2,567	334	7,318	2,703	798	2,945			24,696			1,803
Beaverlodge	6,164	1,694	1,270	4,324	837	419	2,471			20,141			31,156
Bentley	4,953	1,987	1,145	3,718	244	255	2,117			17,460			26,926
Berwyn	4,967	1,869	776	502	255	16	1,133			20,685			24,236
Bonnyville K.H.P.	4,401	1,541	1,270	592	478	459	1,416			13,878	10		19,644
Canmore	13,018	1,981	386	1,037	855	96	237			9,590	103		12,585
Cardston	13,448	7,756	3,954	11,352	937	2,258	755	2,220		32,681	1,219		63,762
Cardungay	5,544	1,736	220	2,293	2,555	4	249			14,849			21,770
Carmangay	14,436	1,381	191	3,423	2,805	1,986	2,069			18,298	3,112		40,888
Castor	5,666	1,848	453	2,233	3,28	324	4,325			13,340	732		24,136
Cereal	3,098	333	180	5,998	3,597	728	1,918			20,431	141		34,496
Coaldale	6,831	937	1,377	4,136	4,594	962	1,006			28,473			31,620
Cold Lake	5,097	698	332	605	506	7	498			27,367	300		30,617
Consort	4,719				2,744	7	4,007			25,719			39,840
Coronation	6,330	3,330	1,523	1,444	361	3,156	4,007			13,682			25,690
Daysland	6,562	2,810	1,164	3,215	2,952	2,713	3,194	782		16,658			23,414
Devon	8,894	3,807	3,002	3,215	16	1,149		1,266	191	27,062			384
Drayton Valley	6,758	641	262	416	1,351	1,300	241			17,452			28,711
Edmore	5,306	1,136	101	2,033	1,316	196	468			18,097	497		24,152
Empress	9,800	101	449	2,033	538	371	672			25,465			33,637
Fort McMurray	7,848	291	174	541	694	517	511			19,362	30		24,701
Glendon	11,374	1,312	618	815	395	686	958			22,035	53		33,637
Hardisty	1,375	828	606	4,359	3,289	686	1,617			10,132			59,709
Hythe	10,614	7,881	1,956	1,360	1,486	2,041	3,346			13,021			17,634
Innisfail	5,476	246	1,736	1,724	446	400	826			18,580			33,808
Islay	9,603	2,269	1,783	4,855	3,061	1,116	2,142			37,845	570		52,281
Jasper	12,230	3,533	919	2,469	314	3,006	3,425	158		29,608			35,768
Killam	7,169	1,371	419	1,083	70	891	2,350			16,242			24,483
Magrath	8,212	1,478	1,148	803	830	1,275	1,261			17,920			23,263
Manning	5,909	2,044	351	3,020	814	1,275	1,159			32,332	136		45,404
Mayerthorpe	8,383	2,446	714	1,582	4,552	1,121	846	1,992		12,667	605		16,318
Mercoal	7,892	246	151	639	1,453	49	508			19,364	488		23,042
Mundare	6,265	2,041	198	4,567	558	337	683			20,603			33,428
Myman	9,823	3,307	1,815	3,674	1,948	1,327	2,437			19,309			29,570
Oyen	10,535	1,082	637	698	881	1,607	940			37,087	1,814		52,175
Provost	4,962	4,275	637	4,880	1,846	1,601	3,721			16,570			24,279
Rayway	12,278	5,845	2,422	9,979	3,22	2,035	2,746			32,134			38,537
Rimney	12,278	5,845	2,422	9,979	3,010	1,501	3,423	2,527		19,616	189		42,5
Rimby Lake	4,757	213	106	978	11	1,533	472			15,906	206		22,388
Smoky Lake	8,061	2,810	1,050	978	5,140	214	1,385			38,818	89		46,573
Three Hills	9,845	566	533	1,166	668	980	1,385			34,613			40,296
Turner Valley	8,489	601	201	1,744	684	439	1,134			16,584			20,146
Vilna	8,504	980	767	925	503	1,718	1,667			20,455			27,195
Willingdon													
Totals	338,296	81,926	39,502	109,666	66,425	42,249	69,643	8,787	349	995,017	10,298		7,998
													1,431,860

TABLE 39—EXPENDITURE ON GENERAL ADMINISTRATION AND PROFESSIONAL CARE OF PATIENTS 1958 (Continued)

PROFESSIONAL CARE OF PATIENTS 1958														
Hospital	General Administration	Operating Room	Delivery Room	Pharmacy	Medical and Surgery	Laboratory	Diagnosis and Radiology	Radio Therapy	Physio-therapy	Nursing—Direct Care of Patients	Medical Records and Library	Emergency Unit	Others*	Total
30 - 89 BEDS														
Atabasca	9,265	1,335	1,119	2,971	855	1,090	4,389			52,061	337		174	64,331
Banff	23,086	4,240	1,051	1,803	3,441	3,373	7,953		2,344	54,539	3,827	377	88	83,036
Barthold	20,729	4,045	2,486	3,562	2,450	3,785	4,702			48,891	1,692			71,613
Blairstown	15,937	5,830	1,873	3,087	1,720	1,527	5,779			33,976	769		2,626	77,187
Bonnyville St Louis	20,884	2,463	2,169	6,062	1,164	4,044	4,328			71,311	1,027			52,850
Brooks	18,364	7,422	3,778	10,515	6,213	3,822	6,528			47,780	1,459			111,048
Calgary Grace	10,773			2,027	4,162					52,562	145			54,114
Calgary St. Elizabeth	13,854	3,156	2,330		12,260	2,071	2,591			50,399			303	75,313
Didsbury	18,310	11,452	2,511	2,888	1,672	2,918	5,086			38,900	3,027		2,088	78,964
Edson	20,054	2,037	934	1,140	195	1,763	2,744			63,073	17		791	80,790
Elk Point	19,054	5,144	1,691	2,795	9,192	1,572	3,483		8	45,268				75,766
Fairview	14,979	10,058	7,066	3,851	2,357	1,780	4,830			42,383				75,473
Fort Macleod	9,335	5,257	2,356	3,411	2,167	2,703	814			27,618	80		1,288	28,863
Fort Vermilion	10,963	1,420	1,122	3,061	1,313	1,876	2,976			98,912	3,594			103,764
Grainland	12,453	2,771	1,364	6,382	1,610	4,581	6,323		152	74,340	3,754		2,261	104,352
Grande Prairie	27,880	19,035	7,094	24,407	8,638	1,876	19,552			73,152	1,271		1,019	102,391
Hanna	21,314	4,595	2,711	3,407	3,407	6,008	7,366		1,200	67,581	1,598			76,406
High Prairie	21,255	11,682	2,052	3,840	2,600	4,581	6,265			41,429	3,193			83,390
High River	21,793	7,497	3,442	3,666	5,554	3,769	7,097		272	52,388				83,115
Lacombe	17,975	5,719	3,442	10,169	2,133	5,649	7,366			72,846	33		1,100	102,754
Lac La Biche	14,223	4,640	3,895	14,196	1,827	4,657	8,385			65,459				84,716
McLennan	25,522	2,950	1,655	4,249	2,133	5,649	7,366			54,126				174,189
Olds	15,477	10,132	3,787	2,557	1,208	4,657	7,036			23,215				30,476
Peace River	15,342	9,198	3,638	3,773	1,417	3,813	2,001	2,448		101,058				133,476
Peach Creek	18,007	7,982	4,818	942	353	2,739	3,900			30,742				50,581
Ponoka	14,501	5,822	2,900	2,245	651	2,739	3,900			28,714				30,476
Rocky Mountain House	27,287	2,507	868	4,668	425	1,111	1,515			66,938	257			84,716
Spirit River	16,680	3,634	3,015	10,440	6,378	2,208	2,761			54,126				59,581
Stettler	20,934	6,361	7,756	17,825	5,688	4,267	16,366			101,058	1,582		6,075	133,476
St. Paul	23,231	6,604	7,152	4,508	5,964	4,780	5,950			23,215				90,666
Taber	20,797	13,999	16,166	10,217	7,302	2,080	6,900			18,074			1,428	174,189
Trochu	9,497	5,307	1,125	10,217	7,302	2,080	6,900			30,742			2,436	25,419
Two Hills	8,928	410	289	2,974	575	760	2,327			30,742			35	47,275
Vegreville	27,678	8,017	1,462	2,974	1,739	7,558	3,679			44,979	4,782		18,634	153,892
Vermilion	15,171	2,864	1,087	2,101	4,252	2,999	4,166			42,525			669	63,549
Wainwright	17,422	1,376	14,678	5,154	2,300	1,715	4,869			26,058	12			72,459
Wetaskiwin	15,307	5,000	4,917	3,282	3,282	1,655	2,896			62,784				46,620
Wetaskiwin	16,742	8,705	3,521	3,857	1,624	7,023	15,786			57,331	90			103,293
Wetaskiwin	22,773	8,210	4,932	15,307	1,784	2,876	7,853			62,228	72			98,503
Wetaskiwin	15,233	10,059	2,202	9,736	4,786	1,128	4,122		47					94,379
Total	705,203	250,287	126,533	273,213	130,571	127,361	248,120	3,123	4,023	2,136,594	34,381	377	42,397	3,376,980

[illegible]

*Includes Expenditure on School of Nursing.

TABLE 40—EXPENDITURES ON GENERAL SERVICE DEPARTMENT, PHYSICAL PLANT, INTEREST AND DEPRECIATION, OTHERS, AND PERQUISITES BY HOSPITAL, 1958

Hospitals	GENERAL SERVICE DEPARTMENT				PHYSICAL PLANT				Interest and Depreciation	Others	Perquisites
	Dietary	Laundry	Bedding and Linen	House-keeping	Total General Services	Operations	Maintenance	Total Physical Plant			
1 - 29 BEDS											
Bassano	18,210	3,830	562	3,315	25,917	5,354	1,005	6,359	10,235	85	5,342
Beaverledge	11,967	1,983	465	3,551	17,966	11,240	1,405	12,645	16,220	124	4,339
Benley	9,846	1,506	342	1,780	12,814	4,503	2,927	7,430	7,914	48	1,904
Berwyn	10,270	1,722	768	3,399	16,159	6,188	1,486	7,674	9,502	150	1,250
Bonnyville K.H.P.	7,651	1,949	403	3,949	13,152	4,526	957	5,513	2,702	634	3,875
Cannore	4,081	1,169	1,243	1,316	7,809	1,611	134	1,745	1,800	1,800	
Cardston	20,456	4,344	1,110	3,482	29,392	4,940	4,005	8,945	22,162	125	1,383
Carmanagay	6,232	2,066	1,162	1,943	10,463	2,561	1,360	3,921	5,942	163	1,745
Castor	29,012	8,289	2,470	5,775	48,546	2,856	5,977	8,831	5,977	864	14,007
Cereal	11,354	2,042	1,035	1,825	16,256	2,541	2,835	5,376	4,698	969	2,966
Couldie	12,548	2,337	1,035	1,825	18,446	1,461	2,313	3,774	7,237	354	2,113
Cold Lake	11,662	2,313	262	2,027	16,264	7,385	1,348	8,733	11,166	136	3,449
Consort	18,324	1,151	1,047	3,894	26,264	7,091	4,718	11,809	7,865		4,356
Crowsnest	18,629	3,657	1,409	4,809	28,504	3,505	2,606	6,111	3,091		1,959
Dayland	6,989	1,677	2,253	1,775	12,694	4,410	2,050	6,385	7,188		4,549
Devon	6,910	2,183	507	2,091	11,691	3,972	496	4,468	10,050		930
Draxton Valley	18,022	1,928	1,970	6,646	28,566	6,613	3,117	9,730	16,028		1,806
Ekville	8,767	2,378	726	2,201	14,072	5,243	3,167	8,409	12,265	40	5,435
Elmira	10,363	2,199	1,511	2,355	16,428	4,302	3,097	7,399	5,243	11	2,398
Empress	17,033	3,271	3,177	3,495	26,976	6,777	5,740	12,517	4,062	204	3,269
Ft. McMurray	7,611	1,795	478	1,616	11,500	4,889	557	5,446	7,883	25	8,353
Glendon	18,324	3,833	609	6,241	29,007	4,823	4,017	8,840	10,157		1,882
Hardisty	7,077	1,046	426	2,338	10,887	2,212	348	2,560	6,101		4,439
Hythe	21,991	5,506	3,314	8,561	39,372	6,523	2,212	8,735	8,409	48	1,879
Innisfall	7,896	1,723	453	1,927	11,999	6,077	4,694	12,581	9,844	9	935
Jasper	15,635	2,119	2,683	5,030	26,844	6,077	6,787	12,864	7,565		4,351
Killam	15,635	2,119	2,683	5,030	30,983	6,619	3,251	9,900	7,412	325	8,311
Magrath	11,041	1,750	1,308	5,661	19,187	4,889	3,252	8,141	7,412	325	8,311
Manning	8,728	1,490	2,452	3,230	15,900	6,784	2,922	9,706	11,388	3,244	2,163
Manville	8,535	2,666	475	2,866	14,542	3,389	2,922	6,311	11,503		2,680
Maverthorpe	19,966	4,267	804	7,421	32,458	1,513	1,157	2,670	9,438	172	1,235
Mercoal	6,563	1,620	559	1,755	10,697	1,513	1,157	2,670	9,438		2,193
Mercure	12,151	4,321	579	1,933	19,179	6,582	3,433	10,015	6,725		3,546
Mundare	18,116	2,811	579	2,933	24,505	6,582	3,433	10,015	6,725		3,546
Nyram	17,807	3,895	1,566	2,007	27,706	6,582	3,433	10,015	6,725		3,546
Oyen	18,959	3,903	1,886	2,007	27,706	6,582	3,433	10,015	6,725		3,546
Post	16,471	3,752	1,660	5,078	27,706	6,582	3,433	10,015	6,725		3,546
Radway	12,711	3,042	1,253	2,778	23,661	11,131	12,765	23,896	15,992	103	3,894
Raymond	12,711	3,042	1,253	2,778	23,661	11,131	12,765	23,896	15,992	103	3,894
Rimby	24,606	4,737	872	2,840	34,055	2,764	6,680	9,444	12,621	184	4,046
Smoky Lake	7,707	1,470	924	4,388	14,489	11,028	3,118	14,146	12,621	184	4,046
Three Hills	3,328	1,071	1,711	3,002	26,209	4,532	1,879	6,411	2,749	330	3,989
Turner Valley	21,487	1,761	669	2,592	26,209	5,848	4,520	10,368	12,802	120	3,706
Vilna	9,844	2,078	180	3,379	15,481	2,236	5,021	7,257	4,016	274	2,556
Willington	11,368	4,516	1,209	2,458	19,551	3,633	2,337	5,970	12,599	36	3,142
									4,508	351	4,110
									4,581	2,809	2,994
									4,638		3,664
Total	579,999	124,212	47,410	156,160	907,481	224,928	136,872	361,800	336,222	10,863	156,298

30 - 89 BEDS

30 - 89 BEDS									
Athabasca	2,906	1,725	4,642	35,507	8,642	4,092	12,734	19,108	5,736
Barrif	7,467	4,436	9,572	57,707	14,528	5,259	19,787	62,473	11,575
Barrhead	26,282	6,132	5,809	46,497	15,563	2,488	19,406	24,550	6,824
Blairmore	27,582	6,381	10,426	44,014	16,128	13,278	29,406	24,550	121
Bonnyville St. Louis	25,961	2,701	6,347	41,410	9,940	5,539	14,729	17,846	7,245
Brooks	35,983	3,105	7,925	55,877	9,240	8,209	17,449	16,019	5,905
Burnsville	38,840	1,453	10,980	28,894	9,651	5,860	31,316	31,316	3,288
Calgary Grace	12,621	2,299	8,710	44,095	7,065	5,590	12,655	11,789	11,900
Calgaryholm	26,011	2,266	10,850	46,458	9,306	10,056	19,092	18,580	5,123
Cardston	29,836	3,506	10,216	30,275	9,360	3,956	9,916	6,307	18
Edson	20,403	807	5,216	30,275	9,360	3,956	9,916	6,307	18
Elk Point	33,262	5,002	12,945	52,986	13,353	7,776	21,129	20,204	8,931
Fairview	30,892	4,548	5,085	41,551	9,926	4,003	13,929	12,077	1,621
Ft. Macleod	21,948	1,731	10,640	37,509	7,523	1,608	19,131	9,143	8,343
Ft. Vermilion	20,832	2,254	7,232	31,925	8,484	7,215	13,693	12,811	6,060
Galahad	26,196	4,688	7,312	43,528	9,924	15,731	13,693	18,771	8,146
Grande Prairie	60,668	3,158	23,347	95,872	18,890	10,563	47,530	47,530	16,524
Hanna	37,517	2,076	8,611	52,571	13,136	33,686	25,573	13,418	13,418
High Prairie	36,527	3,966	8,879	56,759	18,787	17,820	10,179	10,179	9,991
High River	40,124	2,701	11,481	52,919	13,765	18,844	12,188	16,564	10,114
High River	37,720	2,491	10,323	47,442	18,765	16,844	15,347	15,347	10,906
Lacombe	32,885	4,717	12,989	58,754	22,209	12,464	33,487	35,793	9,598
Lac La Biche	32,885	4,717	12,989	58,754	22,209	12,464	33,487	35,793	9,598
McLennan	1,401	1,401	7,683	40,404	9,751	7,645	17,860	17,860	9,010
Olds	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Peace River	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Pincher Creek	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Ponoka	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Rocky Mountain House	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Spirit River	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Stettin	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Talbot	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Talbot	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,060
Talbot	25,680	3,776	5,293	51,552	14,098	7,828	21,926	10,398	9,06

TABLE 40—EXPENDITURES ON GENERAL SERVICE DEPARTMENT, PHYSICAL PLANT, INTEREST AND DEPRECIATION, OTHERS, AND PERQUISITES BY HOSPITAL, 1958 (Continued)

Hospitals	GENERAL SERVICE DEPARTMENT					PHYSICAL PLANT			Interest and Depreciation	Others	Perquisites
	Dietary	Laundry	Bedding and Linen	House-keeping	Total General Services	Operations	Maintenance	Total Physical Plant			
90 - 179 BEDS											
Calgary Crippled Children's	55,914	13,555	3,657	29,194	102,320	39,640	8,118	48,058	40,746	.....	4,988
Camrose	55,028	11,713	2,854	22,429	106,122	24,386	18,833	43,221	26,862	8	14,423
Drumheller	58,379	10,053	2,579	22,193	93,209	21,534	20,934	41,868	13,604	64	7,670
Lamont	58,706	8,656	6,181	17,024	90,567	22,880	17,296	40,806	749	.....	8,109
Red Deer	94,657	17,054	8,486	26,148	148,345	30,868	7,239	38,107	42,724	1,134	28,610
Total	322,684	61,029	27,857	128,993	540,563	139,608	72,482	212,090	126,036	1,955	63,810
180 BEDS AND OVER											
Calgary General	783,162	139,554	72,210	284,695	1,229,621	147,274	112,411	259,685	148,911	7,182	70,942
Calgary Holy Cross	304,588	69,582	34,881	124,146	534,198	64,553	90,794	155,349	245,322	1,978	107,747
Edmonton General	346,914	50,682	22,841	119,694	539,131	55,161	77,907	133,068	117,849	270	84,714
Edmonton Misericordia	251,918	52,702	26,217	119,694	433,529	57,136	166,382	223,525	259,435	2,517	18,154
Edmonton Royal Alexandra	562,978	100,373	46,734	229,634	939,719	323,220	27,828	351,048	232,782	853	65,447
Edmonton University	570,178	92,603	43,999	193,168	899,948	329,472	55,551	385,023	232,782	12,826	39,335
Lethbridge Municipal	209,628	33,692	21,668	64,484	251,559	37,512	7,436	44,948	75,701	1,058	16,275
Lethbridge St. Michael's	163,796	28,813	7,476	51,474	251,559	37,512	7,436	44,948	75,701	1,058	16,275
Medicine Hat	131,555	25,328	7,725	55,771	220,379	46,110	27,599	73,709	230,562	.....	.....
Total	3,274,718	584,329	272,955	1,223,178	5,355,180	948,029	603,165	1,551,194	1,535,844	68,708	384,460
GRAND TOTAL	5,405,824	995,950	460,779	1,865,795	8,728,348	1,770,131	1,111,125	2,881,256	2,877,707	93,588	941,619

TABLE 41

TOTAL INCOME OF APPROVED HOSPITALS FROM GENERAL SERVICES
TO IN-PATIENTS BY HOSPITAL, 1958

Hospitals	Premium Accommodation	Standard	Newborns	Total
1 - 29 BEDS				
Bassano	2	71,791	1,942	73,735
Beaverlodge .....	.....	55,374	1,458	56,832
Bentley	152	37,874	1,086	39,112
Berwyn .....	.....	44,613	1,587	46,200
Bonnyville K.H.P.	9	28,804	987	29,800
Canmore*	94	19,518	196	19,808
Cardston .....	.....	76,770	3,178	79,948
Carmanagay .....	.....	20,550	199	20,749
Castor	4,049	71,674	1,731	77,454
Cereal .....	.....	24,539	760	25,299
Coaldale	172	58,660	1,698	60,530
Cold Lake .....	.....	66,191	4,134	70,325
Consort	935	35,470	1,276	37,672
Coronation .....	.....	48,378	1,476	49,854
Daysland	814	86,996	1,371	89,181
Devon .....	.....	29,482	800	30,282
Drayton Valley**	38	24,476	684	25,198
Eckville .....	.....	62,042	717	62,759
Elnora .....	.....	36,080	1,141	37,221
Empress	924	33,798	1,420	36,142
Ft. McMurray	1,968	45,342	1,273	48,583
Glendon .....	.....	29,332	800	30,132
Hardisty	464	64,297	1,801	66,562
Hythe	26	20,959	582	21,567
Innisfail .....	.....	104,646	2,213	106,859
Islay .....	.....	33,856	618	34,474
Jasper	233	55,181	3,130	58,544
Killam	1,285	84,466	3,174	88,925
Magrath	1,879	56,981	1,474	60,334
Manning .....	.....	55,008	2,564	57,572
Mannville .....	.....	41,475	1,438	42,913
Mayerthorpe	99	70,499	3,358	73,956
Mercoal	50	25,351	813	26,214
Mundare	186	51,387	846	52,419
Myrnam .....	.....	52,796	630	53,426
Oyen .....	.....	36,476	1,020	37,496
Provost .....	.....	63,230	2,090	65,320
Radway	30	46,489	1,714	48,233
Raymond	665	51,944	1,176	53,785
Rimbey	563	96,577	3,633	100,773
Smoky Lake	287	38,181	1,885	40,353
Three Hills	304	69,925	3,207	73,436
Turner Valley	448	68,467	900	69,815
Vilna	18	39,516	1,293	40,827
Willingdon	298	57,601	1,560	59,459
Total	15,992	2,293,062	71,024	2,380,078

(Continued on Next Page)

DIVISION OF HOSPITAL AND MEDICAL SERVICES

TABLE 41—(Continued)

TOTAL INCOME OF APPROVED HOSPITALS FROM GENERAL SERVICES
TO IN-PATIENTS, 1958

Hospitals	Premium Accommodation	Standard	Newborns	Total
30 - 89 BEDS				
Athabasca	76	128,247	4,752	133,075
Banff	21,424	120,941	2,070	144,435
Barrhead	2,938	178,217	4,636	185,791
Blairmore	2,572	126,389	2,346	131,307
Bonnyville St. Louis	2,208	120,995	3,207	126,410
Brooks	60	158,027	2,507	160,594
Calgary Grace	6,844	24,221	3,916	34,981
Claresholm	700	106,193	2,397	109,290
Didsbury	66	125,430	2,442	127,938
Edson	788	107,827	5,151	113,766
Elk Point	6	159,108	2,811	161,925
Fairview	8	130,194	3,885	134,087
Ft. Macleod	8,177	91,532	2,739	102,448
Ft. Vermilion	32	110,207	1,755	111,994
Galahad	246	110,131	1,743	112,120
Grande Prairie	432	287,690	9,176	297,298
Hanna	1,054	146,570	4,431	152,055
High Prairie	2,008	211,613	5,546	219,167
High River	540	162,393	4,429	167,362
Lacombe	1,165	164,941	6,283	172,389
Lac La Biche	686	206,779	4,563	212,028
McLennan	8,322	203,093	5,457	216,872
Olds	353	116,211	2,853	119,517
Peace River	8,514	175,838	5,970	181,808
Pincher Creek	766	117,955	1,822	128,291
Ponoka	4,293	127,806	4,238	132,044
Rocky Mountain House	766	82,513	2,535	85,814
Spirit River	4,293	165,367	3,432	173,092
Stettler	4,482	185,767	3,677	189,444
St. Paul	228	199,844	7,138	207,010
Taber	228	233,978	8,512	242,718
Tofield	3,747	89,508	1,157	100,665
Trochu	766	48,841	1,242	53,630
Two Hills	9,113	90,994	1,869	92,863
Vegreville	71	235,986	4,228	240,337
Vermilion	71	116,895	2,154	119,049
Viking	807	104,669	2,632	107,372
Vulcan	7,152	91,042	2,655	93,697
Wainwright	3,864	147,591	5,141	153,539
Westlock	7,152	262,060	7,066	276,278
Wetaskiwin	3,864	181,548	6,369	191,781
Totals	103,742	5,945,161	161,032	6,209,935
90 - 179 BEDS				
Calgary Crippled Children's	15,362	301,962	9,831	301,962
Camrose	2,742	362,082	2,773	387,275
Drumheller	17,094	94,047	3,381	99,562
Lamont	4,288	261,858	13,335	282,333
Red Deer	4,288	420,872	13,335	438,495
Total	39,486	1,440,821	29,320	1,509,627
180 BEDS AND OVER				
Calgary General	255,228	3,288,137	85,393	3,628,758
Calgary Holy Cross	192,068	1,614,267	41,051	1,847,386
Edmonton General	191,130	1,918,241	50,039	2,159,410
Edmonton Misericordia	313,725	504,742	26,984	845,451
Edmonton Royal Alexandra	310,996	2,783,271	239,204	3,333,471
Edmonton University*	156,750	3,254,829	38,058	3,449,637
Lethbridge Municipal	52,819	942,573	16,783	1,012,175
Lethbridge St. Michael's	81,658	877,593	10,559	969,810
Medicine Hat	19,602	657,693	14,340	691,635
Total	1,573,976	15,841,346	522,411	17,937,733
GRAND TOTAL	1,733,196	25,520,390	783,787	28,037,373

*April to December

**August to December

TABLE 42—HOSPITAL EARNINGS FROM SPECIAL SERVICES TO IN-PATIENTS AND OUT-PATIENTS AND OTHER INCOME BY HOSPITAL 1958

Hospitals	GROSS EARNINGS FROM SPECIAL SERVICES TO OUT-PATIENTS										Total Gross Earnings From Special Services	Total Gross Earnings From In-Patients General Services to In-Patients From all Services	Deductions From Gross Earnings	Net Earnings	Other Income	Total Income
	Operating Room	Pharmacy (dispensary)	Medical and Surgical	Supplies and Services	Laboratory	Diagnostic Radiology	Other	Total Gross Earnings	Total Gross Earnings From Special Services	Total Gross Earnings From In-Patients General Services to In-Patients From all Services						
1 - 29 BEDS																
Bassano	389	15	334	887	98	1,252	.....	2,088	2,601	73,735	76,336	1,416	74,920	735	6,643	75,655
Beaverlodge	450	307	867	132	132	1,496	.....	3,252	3,751	56,832	60,583	1,329	59,254	6,897	60,951	66,848
Bentley	270	202	74	101	13	973	73	1,190	1,610	39,112	40,722	575	40,147	20,969	59,116	80,086
Berwyn	181	59	156	12	420	832	.....	854	1,190	46,200	47,390	160	46,211	5,596	51,807	57,403
Bonnyville K.H.P.	187	10	15	.....	7	46	.....	46	46	19,808	19,854	1,293	18,561	7,594	26,155	33,755
Cannore*	1,692	352	282	533	1,788	4,365	.....	4,365	6,005	20,749	26,754	3,193	23,556	56,627	45,066	78,683
Cardston	300	5,036	172	144	125	362	.....	5,705	1,163	77,454	78,617	1,177	77,440	21,507	99,947	121,454
Carmangay	172	144	125	362	38	684	.....	991	1,163	77,454	78,617	1,177	77,440	21,507	99,947	121,454
Castor	284	109	91	11	2,272	976	.....	2,767	2,999	70,525	73,524	1,579	71,945	7,308	79,253	86,561
Cereal	232	126	13	56	127	976	.....	1,298	2,999	70,525	73,524	1,579	71,945	7,308	79,253	86,561
Coastal	19	178	120	3	8	438	.....	705	724	37,672	38,396	505	37,891	18,248	56,139	94,037
Cold Lake	132	8	117	110	160	606	.....	2,211	2,211	80,582	82,793	440	82,353	26,942	109,295	136,237
Consort	89	186	18	117	647	2,285	85	2,932	4,141	25,729	34,296	779	33,517	7,342	40,859	48,199
Devon	385	37	67	67	3	467	103	831	831	62,759	63,590	387	63,203	2,770	65,973	68,743
Drayton Valley**	197	197	197	197	197	197	197	1,016	1,016	38,237	39,253	788	38,465	4,372	42,837	47,189
Eckville	302	468	99	136	54	487	11	2,532	2,532	36,142	38,674	1,485	37,189	7,928	45,117	52,045
Elmira	81	1,069	156	262	58	409	311	3,305	3,311	48,383	51,694	1,183	50,511	17,013	67,524	84,537
Empress	6	262	696	262	58	409	311	1,132	1,197	20,132	21,329	578	20,751	15,749	36,500	57,249
Fort McMurray	136	16	238	229	229	1,901	.....	3,532	3,532	6,562	70,114	405	69,709	.....	70,404	73,949
Glendon	990	190	190	190	190	1,901	.....	638	4,706	106,859	111,335	5,375	105,960	8,043	113,993	122,033
Hardisty	48	37	5	191	4	272	.....	390	4,476	21,567	22,273	.....	22,273	46	22,319	22,365
Hythe	575	.....	.....	.....	331	2,572	.....	3,901	4,476	106,859	111,335	5,375	105,960	8,043	113,993	122,033
Innisfail	80	30	371	998	331	2,572	.....	3,901	4,476	106,859	111,335	5,375	105,960	8,043	113,993	122,033
Islay	64	30	371	998	331	2,572	.....	3,901	4,476	106,859	111,335	5,375	105,960	8,043	113,993	122,033
Jasper	594	1,753	698	755	353	3,533	258	7,941	8,535	88,925	97,460	1,201	96,260	145	96,405	100,910
Killam	243	438	378	84	729	1,872	.....	1,872	1,872	57,572	59,444	421	57,053	10,739	67,792	78,531
Magrath	198	610	86	155	81	1,219	.....	2,151	2,349	42,913	45,262	586	42,676	2,947	45,623	48,570
Manville	15	1,222	324	809	178	875	40	3,028	3,028	73,956	77,039	1,088	76,951	30,088	107,039	137,127
Mayerthorpe	648	250	178	802	5	1,298	.....	3,181	3,181	29,355	32,536	1,398	31,138	56,749	87,887	118,926
Mercoal	2,538	46	335	203	108	726	35	1,453	3,901	52,419	56,320	1,715	54,605	10,765	65,370	76,075
Mundare	705	266	280	148	63	447	192	1,396	2,843	57,426	58,821	1,715	57,106	10,765	67,871	78,636
Nynan	237	337	371	216	443	1,571	.....	3,123	3,123	68,507	71,630	480	71,150	25,843	96,993	122,143
Oyen	64	323	128	288	32	2,295	.....	2,377	2,377	53,785	56,164	1,431	54,753	103,038	157,791	212,549
Radost	323	377	96	123	125	1,489	180	1,278	1,278	100,773	105,509	2,318	103,191	36,491	139,682	175,173
Raymond	101	97	180	120	101	.....	.....	1,235	1,235	40,353	41,588	592	40,996	14,059	55,055	66,057
Rimbey	315	695	178	527	143	2,818	69	4,583	2,126	73,436	75,562	1,046	74,516	8,074	82,590	90,664
Smoky Lake	647	187	377	247	.....	1,146	.....	1,962	2,126	69,815	71,941	913	70,928	14,810	85,738	96,548
Turner Hills	164	454	721	23	487	1,112	94	1,438	1,438	44,300	45,738	1,439	44,299	42,861	87,160	131,459
Turner Valley	1,119	379	261	347	280	1,067	.....	2,354	3,473	61,766	65,239	4,863	60,376	228	60,604	64,672
Vilna	127	332	269	269	220	1,901	207	2,180	2,307	59,459	61,766	4,863	56,903	460,163	470,866	517,832
Willingdon	251	332	269	269	220	1,901	207	2,180	2,307	59,459	61,766	4,863	56,903	460,163	470,866	517,832
Total	12,327	13,730	15,399	10,657	5,235	46,557	2,879	94,457	106,764	2,380,078	2,486,862	61,812	2,425,050	460,163	2,885,213	3,345,423

TABLE 42—HOSPITAL EARNINGS FROM SPECIAL SERVICES TO IN-PATIENTS AND OUT-PATIENTS AND OTHER INCOME BY HOSPITAL 1958 (Continued)

Hospitals	GROSS EARNINGS FROM SPECIAL SERVICES TO OUT-PATIENTS										Total Gross Earnings from Special Services	Total Gross Earnings from General Services to In-Patients	Total Gross Earnings from Special Services	Deductions From Gross Earnings	Net Earnings	Other Income	Total Income
	Operating Room	Pharmacy (dispensary)	Medical and Surgical Services and Supplies	Laboratory	Diagnostic Radiology	Other	Total Earnings	Total Gross Earnings from Special Services	Total Gross Earnings from General Services to In-Patients	Total Gross Earnings from All Services							
30 - 89 BEDS																	
Athabasca	94	91	50	142	85	2,351	70	2,789	2,883	133,075	135,958	2,763	133,195	13,332	146,527		
Banff	453	827	147	708	224	2,894	1,032	5,832	6,285	144,435	150,720	2,254	148,466	24,786	173,252		
Barrehead	1,008	1,008	708	2,178	1,008	1,008	34	2,178	2,886	185,791	188,677	2,597	186,080	20,278	207,786		
Bismarck	227	373	250	538	319	5,205	4	6,719	6,946	131,307	138,253	1,644	136,609	24,659	161,268		
Bonnyville, St. Louis	470	380	5	538	347	980	4	1,716	2,186	126,410	128,596	12,939	114,657	836	115,493		
Brooks	498	.....	.....	37	176	1,445	.....	1,901	2,399	160,594	162,993	2,013	160,980	38,072	199,052		
Calgary Grace	1,741	.....	.....	.....	.....	.....	.....	.....	1,741	34,981	36,722	1,659	35,063	74,575	109,638		
Clareholm	1,335	790	11	163	322	2,448	109	3,843	5,894	109,290	116,116	21,911	94,205	17,697	111,902		
Disbury	1,751	408	107	228	136	3,851	.....	4,730	4,740	113,766	118,506	2,881	117,663	18,467	149,118		
Edson	25,640	400	178	348	13	60	249	648	26,288	161,925	188,213	5,325	182,888	9,637	192,525		
Elk Point	380	539	18	103	84	2,225	.....	4,118	4,118	134,087	138,205	3,051	135,154	12,334	147,488		
Fairview	1,700	251	191	26	187	1,493	.....	2,969	3,359	102,448	105,807	1,139	104,668	13,517	118,185		
Ft. Vermilion	521	236	415	14	139	840	9	1,713	3,828	111,994	115,822	21,994	94,868	7,645	102,513		
Galahad	1,876	2,094	879	1,392	2,454	18,697	.....	25,516	27,392	297,298	324,690	9,044	315,634	37,314	352,948		
Grande Prairie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hanna	596	1,494	548	.....	421	1,007	.....	1,518	1,518	152,055	153,573	1,207	152,366	4,656	157,022		
High Prairie	1,368	321	488	375	4,064	.....	725	10,235	10,831	219,167	229,998	30,196	199,802	17,036	216,838		
High River	194	513	67	17	158	533	.....	6,816	8,336	167,362	175,698	3,977	171,721	23,095	194,817		
Lac La Biche	1,896	503	70	17	55	2,451	15	2,014	3,910	212,028	221,938	10,408	211,530	20,437	231,967		
McLennan	1,056	525	228	509	257	2,451	35	3,804	5,508	119,517	125,025	1,253	123,772	29,030	152,805		
Olds	218	681	52	244	257	3,351	705	5,290	11,570	181,808	193,378	4,681	188,697	13,029	201,726		
Peace River	838	838	876	1,348	1,401	6,880	227	11,570	11,570	181,808	193,378	4,681	188,697	13,029	201,726		
Pincher Creek	56	717	6	147	211	2,045	44	3,170	3,226	128,291	131,517	1,093	130,424	3,243	133,667		
Ponoka	909	233	72	34	36	1,288	90	1,813	2,722	132,044	134,766	4,093	130,673	39,575	170,248		
Rocky Mountain House	339	171	34	62	110	342	120	839	1,178	173,092	176,522	7,868	168,654	17,462	186,116		
Spirit River	1,869	301	95	74	259	823	9	1,561	3,430	199,444	201,303	1,899	199,404	16,600	216,004		
Stettler	733	733	175	2	28	140	781	1,561	3,430	199,444	201,303	1,899	199,404	16,600	216,004		
St. Paul	163	.....	.....	577	367	3,120	76	5,354	5,517	181,464	186,981	5,656	181,325	4,735	186,060		
Taber	1,889	897	191	268	152	2,008	.....	5,516	7,405	242,718	250,123	2,207	247,916	293,069	541,000		
Tofield	535	227	103	71	25	4,046	.....	2,472	3,007	100,665	103,672	4,162	99,510	8,373	107,883		
Trochu	363	54	128	114	413	690	105	1,504	1,867	53,830	55,697	372	55,325	13	55,338		
Two Hills	2	.....	.....	84	71	2,077	.....	1,504	2,517	92,863	95,380	1,659	93,721	4,654	98,375		
Vegreville	847	536	65	406	455	2,543	49	4,054	4,901	249,337	254,238	4,989	249,249	7,962	257,215		
Vermilion	37	197	2	28	433	4,255	150	5,065	5,102	119,049	124,151	4,437	119,714	9,461	129,175		
Viking	1,008	121	2,666	2,190	1,221	4,678	57	10,933	11,941	107,372	119,313	1,779	117,534	15,598	133,132		
Vulcan	166	.....	.....	91	2,344	.....	.....	2,601	2,601	93,697	96,298	1,538	94,760	7,181	101,941		
Wainwright	662	224	1,048	1,489	7,928	.....	.....	11,351	11,903	153,539	165,442	1,452	163,990	7,558	171,548		
Westlock	312	20	267	4	78	1,962	64	2,476	2,763	276,278	279,041	2,590	276,451	16,502	292,953		
Wetaskin	327	21	21	267	3	3,359	.....	3,977	3,977	191,781	195,758	3,407	192,351	1,974	194,325		
Total	51,280	20,257	9,095	11,850	14,722	121,137	4,759	181,820	233,100	6,209,935	6,443,035	239,918	6,203,117	630,123	6,833,240		

90 - 179 BEDS

Calgary Crippled Children's	1,584	778	.....	451	99	4,103	4,229	8,882	8,882	301,962	310,844	12,956	297,888	176,459	474,347
Camrose	469	520	245	518	811	1,716	13	4,081	5,665	387,275	392,940	5,005	387,935	9,318	397,253
Drumheller	1,070	527	759	157	886	8,594	727	11,673	12,142	99,562	111,704	7,128	104,576	189,474	294,050
Lamont	1,595	159	455	24	247	2,787	8	2,860	3,460	282,333	285,793	9,836	275,957	17,515	293,472
Red Deer .....	.....	.....	.....	1,121	247	4,186	1,200	7,368	8,963	438,495	447,458	6,117	441,341	52,923	494,264
Total	4,248	1,524	1,463	2,271	2,043	21,386	6,177	34,864	39,112	1,509,627	1,548,739	41,042	1,507,697	445,689	1,953,386
180 BEDS AND OVER															
Calgary General	27,979	7,037	1,049	2,305	8,907	27,432	52,191	98,921	126,900	3,628,758	3,755,658	28,957	3,726,701	229,498	3,956,199
Calgary Holy Cross	50,348	2,295	68	.....	6,123	24,687	21,843	55,219	105,567	1,847,386	1,952,953	36,573	1,916,380	159,615	2,075,995
Edmonton General	8,670	82	412	.....	12,326	8,674	24,993	80,177	88,847	2,159,410	2,248,257	158,898	2,089,359	253,235	2,342,594
Edmonton Misericordia	9,366	6,750	4,082	.....	4,766	11,579	11,579	35,571	44,937	845,451	890,388	+ 16,451	906,839	1,127,109	2,033,948
Edmonton Royal Alexandra	18,724	1,604	4,283	6,292	3,717	40,167	67,103	123,257	141,981	3,333,471	3,475,452	45,370	3,430,082	405,294	3,835,376
Edmonton University*	119,767	2,370	33,545	.....	20,840	46,797	66,103	169,655	289,422	2,449,637	3,739,059	45	3,739,059	366,488	4,105,547
Lethbridge Municipal	8,518	2,348	131	120	8,986	25,694	23,517	58,197	62,014	1,012,175	1,074,189	23,552	1,050,637	440,074	1,490,711
Lethbridge St. Michael's	8,518	.....	.....	.....	5,416	9,808	2,563	20,386	28,634	969,810	998,444	39,394	959,050	17,830	976,880
Medicine Hat	1,861	10	15	3,945	1,421	742	298	6,431	8,292	691,635	699,927	17,054	682,873	226,369	909,242
Total	248,780	22,496	43,595	12,662	72,809	226,661	269,591	647,814	896,594	17,937,733	18,834,327	333,347	18,500,980	3,225,512	21,726,492
GRAND TOTAL	316,635	58,007	69,552	37,440	84,809	415,741	283,406	958,955	1,275,590	28,037,373	29,312,963	676,119	28,636,844	4,761,487	33,398,331

*9 Months only—April to December
 **5 Months only—August to December

TABLE 43—ANALYSIS OF VALUE AND DEPRECIATION OF BUILDINGS, IMPROVEMENTS, PERMANENT FIXTURES AT COST BY HOSPITAL* 1958

Hospitals	PLANT ASSETS				DEPRECIATION OF PLANT ASSETS						
	Gross Book Value at Beginning of Year	Add: Additions During Year	Total	Less: Write-Offs During Year	Gross Book Value at End of Year	Depreciation Accumulated at Beginning of Year	Add: Depreciation Provided for the Year	Total	Less: Accumulated Depreciation On Assets Retired During Year	Depreciation Accumulated at End of Year	Net Book Value at End of Year
1 - 29 BEDS											
Bassano	41,385	147,832	189,217		189,217	19,280	1,822	21,102		21,102	168,115
Beaverlodge	174,246		174,246		174,246	18,217	9,152	27,369		27,369	146,877
Bentley	100,020		100,020		100,020	37,979	5,001	42,980		42,980	56,940
Berwyn	109,785	2,074	111,859		111,859	37,946	5,566	43,512		43,512	68,347
Bonnyville K.H.P.	46,073	31	46,104		46,104	15,331	1,539	16,870		16,870	29,234
Cardston	30,478		30,478		30,478	4,545	1,524	6,069		6,069	24,409
Carmangay†	5,029	154,777	159,806		159,806	8,055		10,206		10,206	159,806
Castor	86,026		86,026		86,026	12,159	2,151	14,325		14,325	75,820
Cereal	34,549		34,549		34,549	12,166	2,159	14,325		14,325	20,224
Coudale	91,639	678	92,317		92,317	11,340	4,616	15,956		15,956	76,361
Cold Lake	10,000		10,000		10,000	3,900	5,715	9,615		9,615	228,973
Consort	109,099	228,593	238,593		238,593	48,655	5,428	54,083		54,083	55,016
Coronation	19,675		19,675		19,675	10,811	984	11,795		11,795	7,880
Daysland	91,837		91,837		91,837	22,674	2,256	24,970		24,970	66,867
Drayton Valley	125,338	87,672	213,010		213,010	4,431	2,256	24,970		24,970	208,579
Edmonton	127,930	6,619	134,549		134,549	52,225	6,645	58,870		58,870	75,679
Elkville	51,144		51,144		51,144	21,700	2,557	24,257		24,257	26,887
Enora	41,329		41,329		41,329	7,567	2,582	10,149		10,149	31,180
Empress	72,234		72,234		72,234	29,031	1,806	30,837		30,837	41,397
Fort McMurray	71,268		71,268		71,268	13,541	3,563	17,104		17,104	54,164
Glendon	143,663	1,200	144,863		144,863	29,028	3,038	32,066		32,066	112,797
Hardisty	32,823	717	33,540		33,540	15,578	1,231	16,809		16,809	16,731
Hythe	112,777		112,777		112,777	39,208	2,819	42,027		42,027	70,750
Innisfail	112,777		112,777		112,777	16,653	1,064	17,717		17,717	3,554
Islay	21,271		21,271		21,271	53,015	4,292	57,307		57,307	118,754
Jasper	176,061		176,061		176,061	33,105	4,372	37,477		37,477	59,663
Kilam	97,140		97,140		97,140	20,405	3,112	23,517		23,517	122,140
Magrath	143,440	2,217	145,657		145,657	25,236	9,361	34,597		34,597	151,237
Manning	135,456	1,028	136,484	12,000	184,484	25,236	2,267	27,503	1,350	26,153	15,720
Mannville	39,987		39,987		39,987	22,267	2,000	24,267		24,267	15,720
Mayerthorpe	97,837		97,837		97,837	53,076	2,856	55,932		55,932	41,905
Mercoal	43,757		43,757		43,757	1,635	3,368	5,003		5,003	38,097
Mundare	78,382	1,711	80,093		80,093	10,313	1,991	12,304		12,304	67,789
Myrnam	175,038		175,038		175,038	33,874	8,752	42,626		42,626	132,412
Oyen	48,879		48,879		48,879	16,847	2,801	19,648		19,648	29,231
Provost	190,515	1,919	192,434	125	192,309	65,871	5,162	71,033		71,033	121,276
Raydow	35,878		35,878		35,878	22,504	897	23,401		23,401	12,477
Raymond	48,876	206	49,082		48,882	12,201	1,222	13,423		13,423	35,459
Rimber	122,769		122,769		122,769	54,352	6,138	60,490		60,490	62,279
Smoky Lake	27,486	978	28,464		28,464	2,366	1,067	3,433		3,433	25,031
Three Hills	113,045	182	113,227		113,227	50,084	5,661	55,745		55,745	57,482
Turner Valley	46,882	465	47,347		47,347	4,688	2,362	7,050		7,050	40,297
Vilna	49,033	2,075	51,108	10	51,098	7,260	3,168	10,428		10,428	40,670
Willingdon	31,798		31,798		31,798	10,218	1,589	11,807		11,807	19,991
Total	3,511,020	640,974	4,151,994	12,135	4,139,859	974,747	147,860	1,122,607	1,350	1,121,257	3,018,602

30 - 89 BEDS

Athabasca	294,734	294,734	176,679	294,734	53,709	9,380	63,089	231,645
Banff	781,028	1,034,668	176,679	857,989	27,656	17,757	26,918	831,071
Barhead	509,411	509,411	176,679	393,989	75,000	25,471	70,550	438,461
Blairmore	254,795	254,795	176,679	254,795	75,000	25,471	88,500	166,295
Bonnyville St. Louis	444,203	4,570	176,679	448,773	30,516	11,183	41,704	407,069
Brooks	250,925	250,925	176,679	250,925	70,806	6,273	77,079	173,846
Calgary Grace	595,956	4,761	176,679	600,717	25,306	11,919	37,225	563,492
Claresholm	185,079	792	176,679	185,079	62,729	11,519	24,248	160,387
Didsbury	229,803	91,032	176,679	230,375	65,569	2,258	37,827	156,127
Edson	91,032	91,032	176,679	90,882	62,729	11,519	74,248	53,095
Elk Point	223,219	400	176,679	223,219	68,517	11,161	79,678	143,534
Fairview	360,000	132,219	176,679	160,990	52,202	8,043	60,205	100,745
Fort Macleod	387,262	132,219	176,679	137,270	26,141	5,990	32,131	386,340
Fort Vermilion	137,270	137,270	176,679	137,270	40,351	6,863	47,214	90,056
Galahad	312,060	312,060	176,679	312,060	26,200	7,801	34,001	278,059
Grande Prairie	614,585	496,147	176,679	1,110,692	156,195	7,692	163,887	946,805
Hanna	201,683	158,944	176,679	360,627	125,147	2,400	127,547	233,080
High Prairie	212,397	161,941	176,679	72,878	30,712	3,642	34,354	288,542
High River	208,986	208,986	176,679	374,338	66,688	9,358	76,046	208,986
Lacombe	563,063	10,482	176,679	208,986	94,837	10,449	105,286	468,239
Lac La Biche	570,189	2,273	176,679	572,462	55,209	13,467	68,676	503,793
McLennan	250,845	8,518	176,679	259,323	44,295	6,806	51,101	208,222
Peace River	147,355	50	176,679	146,655	86,453	7,370	93,823	53,582
Pemrose	361,572	20,738	176,679	382,310	56,503	1,899	58,402	316,808
Ponoka Creek	267,910	905	176,679	268,815	101,393	19,377	120,770	143,032
Ponoka	138,754	1,000	176,679	139,754	43,158	5,762	48,920	90,832
Rocky Mountain House	403,383	289,158	176,679	403,383	86,535	20,169	106,704	297,686
Spirit River	289,158	289,158	176,679	289,158	93,588	20,169	113,757	175,407
Stettler	211,980	211,980	176,679	211,980	38,898	10,599	49,457	162,523
Taber	475,180	5,876	176,679	481,053	69,522	11,990	81,512	399,543
Tofield	225,619	2,317	176,679	227,936	48,457	8,420	56,877	170,046
Trochu	228,362	1,121	176,679	229,483	41,743	5,712	47,455	181,017
Two Hills	216,155	19,952	176,679	236,107	44,994	5,904	50,898	166,378
Vegreville	562,330	5,608	176,679	567,938	42,130	14,058	56,188	526,094
Vermilion	387,637	19,952	176,679	387,637	49,605	9,691	59,296	328,341
Viking	188,224	5,608	176,679	201,052	61,182	9,982	71,164	123,888
Vulcan	182,444	5,608	176,679	187,977	70,406	4,693	75,099	112,878
Wainwright	534,199	84,468	176,679	324,908	129,251	12,426	141,677	183,231
Westlock	243,756	4,400	176,679	248,156	118,264	9,960	128,224	425,346
Wetaskiwin	243,756	4,400	176,679	248,156	118,264	9,960	128,224	425,346
Total	12,762,786	1,386,930	179,129	13,970,586	2,473,592	397,721	2,871,313	2,852,028
		14,149,715						11,118,558

TABLE 43—ANALYSIS OF VALUE AND DEPRECIATION OF BUILDINGS, IMPROVEMENTS, PERMANENT FIXTURES AT
COST BY HOSPITAL * 1958 (Continued)

Hospitals	PLANT ASSETS					DEPRECIATION OF PLANT ASSETS					
	Gross Book Value at Beginning of Year	Add: During Year	Total	Less: Write-offs During Year	Gross Book Value at End of Year	Depreciation Accumulated to Beginning of Year	Add: Depreciation Provided for the Year	Total	Less: Depreciation On Assets Retired During Year	Depreciation Accumulated to End of Year	Net Book Value at End of Year
90 - 179 BEDS											
Calgary Crippled Children's†	662,004	6,091	6,091	.....	665,624	171,501	21,937	193,438	.....	193,438	6,091
Camrose	674,378	3,620	665,624	.....	674,378	237,209	16,860	254,069	.....	254,069	472,186
Drumheller	330,474	3,263	333,737	.....	333,737	27,531	8,262	35,793	.....	35,793	420,309
Lamont	666,164	1,755	667,919	.....	667,919	149,532	16,537	166,069	.....	166,069	297,944
Red Deer											501,850
Total	2,333,020	14,729	2,347,749	.....	2,347,749	585,773	63,596	649,369	.....	649,369	1,698,380
180 BEDS AND OVER											
Calgary Holy Cross	4,256,200	6,825	4,263,025	14,840	4,248,185	433,213	99,328	532,541	.....	532,541	3,715,644
Edmonton General	4,109,494	.....	4,109,494	.....	4,109,494	994,068	100,001	1,094,069	.....	1,094,069	3,015,425
Edmonton Misericordia	2,011,767	.....	2,011,767	.....	2,011,767	381,314	50,284	531,408	.....	531,408	1,480,359
Edmonton Royal Alexandra	5,259,674	1,147,804	6,407,478	.....	6,407,478	1,185,819	107,526	1,293,345	.....	1,293,345	5,114,133
Edmonton University†	9,377,263	1,252,507	10,629,770	.....	10,629,770	10,629,770	336,371	336,371	.....	336,371	10,629,770
Lethbridge Municipal	3,829,572	10,824	3,840,396	.....	3,840,396	238,838	97,533	336,371	.....	336,371	3,004,025
Lethbridge St. Michael's	1,051,621	855	1,052,476	.....	1,052,476	220,026	25,043	245,069	.....	245,069	806,807
Medicine Hat	3,035,147	17,184	3,052,331	.....	3,052,331	15,190	75,719	93,969	.....	93,969	2,958,362
Total	32,430,738	2,435,999	34,866,737	14,840	34,851,897	3,568,268	559,104	4,127,372	.....	4,127,372	30,724,525
GRAND TOTAL	51,037,564	4,478,632	55,516,195	206,104	55,310,091	7,602,380	1,168,281	8,770,661	20,635	8,750,026	46,560,065

*Excluding Camrose, Devon and Calgary General.

†Depreciation not available.

TABLE 44—ANALYSIS OF VALUE AND DEPRECIATION OF FURNITURE AND EQUIPMENT AT COST BY HOSPITAL,* 1958

Hospital	PLANT ASSETS				DEPRECIATION OF PLANT ASSETS						
	Gross Book Value at Beginning of Year	Add: During Year	Total	Less: Write-Offs During Year	Gross Book Value at End of Year	Depreciation Accumulated to Beginning of Year	Add: Depreciation Provided for Year	Total	Less: Accumulated Depreciation on Assets Retired During Year	Depreciation Accumulated to End of Year	Net Book Value at End of Year
- 29 BEDS	22,914	1,051	23,965		23,965	15,012	1,361	16,373		16,373	7,592
Assano	36,600	670	37,270		37,270	8,565	2,458	11,023		11,023	26,247
Beaverlodge	18,516	971	19,487		19,487	12,080	1,932	14,012		14,012	5,474
Bentley	37,435	2,519	39,954		39,954	28,709	3,936	32,645		32,645	7,309
Berwyn	18,936	1,980	20,916		20,916	9,289	1,163	10,452		10,452	10,464
Bonnyville K.H.P.		1,252	1,252				119	119			1,133
Camore	26,638	1,282	27,920		27,920	7,535	2,760	10,295		10,295	17,625
Carlston	5,029	9,246	14,139	136	14,139	6,346		760		760	13,379
Charnagay†	36,384	2,625	39,009	209	38,800	6,346	2,291	8,637		8,637	30,013
Chesler	15,210	5,759	20,969		20,969	10,722	2,477	13,199		13,199	7,770
Coldale	25,254	962	26,215		26,215	8,424	2,622	11,046		11,046	15,169
Cold Lake	7,579	32,178	39,757	28	39,729	3,008	1,377	4,385		4,385	35,344
Consort	20,149		20,149		20,149	10,066	1,344	11,350		11,350	8,799
Coronation	20,842	302	21,144		21,144	15,295	2,107	17,402		17,402	3,742
Daysland	69,883	614	70,497		70,497	38,627	4,892	43,519		43,519	26,978
Drayton Valley		36,528	36,528		36,528		1,209	1,209		1,209	35,319
Edgemoor	35,877	1,908	37,785		37,785	22,836	3,733	26,569		26,569	11,216
Elmhurst	15,166	1,534	16,700	207	16,493	11,607	1,649	13,256	207	13,049	3,441
Empress	22,524	1,326	23,850	5	23,845	16,363	1,480	17,843		17,843	6,002
Fort McMurray	44,033	2,746	46,779		46,779	32,961	2,773	35,734		35,734	10,045
Glendon	27,095	705	27,800		27,800	10,132	2,852	12,984		12,984	14,811
Hardisty	42,551	533	43,084		43,084	5,969		5,969		5,969	37,115
Hythe	9,707	65	9,772		9,772	6,478	6,483	12,961		12,961	3,401
Innisfail	63,850	1,300	65,150		65,150	26,478		26,478		26,478	32,189
Insley	21,664	2,716	24,380		24,380	12,362	1,367	13,729		13,729	8,651
Jasper	38,227	2,283	40,510	244	40,011	23,889	2,527	26,416		26,416	13,595
Killarney	33,497	1,231	34,728		34,728	25,378	3,040	28,418		28,418	16,253
Killam	38,717	1,895	40,612		40,612	21,907	2,028	23,935	69	23,866	18,762
Magrath	15,652	1,810	17,462	298	17,164	3,930	1,583	5,513		5,513	11,949
Manning	25,957	1,089	27,046	245	26,201	20,846	2,593	23,439		23,439	7,622
Manville	48,879	466	49,345	182	49,163	18,513	3,084	21,597		21,597	27,566
Marvethrope	2,898	5,774	8,672		8,672	158		158		158	7,706
Mercoal	38,759	2,422	41,181		41,181	15,972	2,915	18,887		18,887	22,294
Mirdare	39,960	1,292	41,252		41,252	31,575	4,093	35,668		35,668	5,584
Mymran	12,557		12,557		12,557	5,847	734	6,581		6,581	5,976
Oyen	68,825	2,647	71,372	17,024	54,348	34,774	3,667	38,441	19,015	19,426	34,922
Provost	26,238	2,26	26,464		26,464	15,502	1,852	17,354		17,354	9,110
Raymond	21,791	2,303	24,094		24,094	13,593	1,769	15,362		15,362	8,732
Raymond	30,869	460	31,329		31,329	25,905	3,133	29,038		29,038	2,291
Rimbye	12,051	2,153	14,205		14,205	1,680	852	2,532		2,532	11,673
Smoky Lake	46,217	1,747	47,964	167	47,797	39,872	4,756	44,628	125	44,503	3,274
Three Hills	17,166	4,064	21,230		21,230	9,516	2,040	11,556		11,556	9,674
Turner Valley	29,374	3,292	32,666		32,666	14,090	1,413	15,503	960	14,543	13,293
Vilna	38,194	757	38,951	1,200	38,951	17,402	3,048	20,450		20,450	18,501
Willington											
Total	1,238,408	147,241	1,385,649	19,945	1,365,704	667,484	101,559	769,043	20,376	748,667	617,037

TABLE 44 — ANALYSIS OF VALUE AND DEPRECIATION OF FURNITURE, AND EQUIPMENT AT COST BY HOSPITAL, * 1958 (Cont'd)

Hospital	PLANT ASSETS				DEPRECIATION OF PLANT ASSETS						
	Gross Book Value at Beginning of Year	Add: Additions During Year	Total	Less: Write-Offs During Year	Gross Book Value at End of Year	Depreciation Accumulated to Beginning of Year	Add: Depreciation Provided For Year	Total	Less: Depreciation Accumulated on Assets Retired During Year	Depreciation to End of Year	Net Book Value at End of Year
30 - 89 BEDS											
Athabasca	64,005	1,794	65,799	79	65,720	38,109	3,260	41,369		41,369	24,351
Banff	129,105	78,295	207,400	17,946	189,454	22,542	11,685	34,227		26,315	163,133
Barhead	85,149	8,082	93,231		93,231	17,164	6,883	24,047	7,912	24,047	69,184
Blairmore	123,413	8,504	131,917		131,917	93,801	7,553	101,354		101,354	30,563
Bonnyville St. Louis	67,294	7,656	74,950		74,950	16,888	5,257	22,145		22,145	52,805
Brooks	51,243	1,710	52,953		52,953	11,339	9,939	21,278		15,278	37,675
Calgary Grace	98,968		98,968		98,968	34,423	19,397	53,820		53,820	45,148
Clareholm	52,706	4,506	57,212		57,212	26,315	5,609	31,924		31,924	25,288
Didsbury	58,678	1,440	60,118		60,118	33,553	3,795	37,348	8,691	28,657	28,969
Edson	61,867	5,067	67,037	57	66,980	28,786	4,049	32,835	58	32,777	34,203
Elk Point	45,754	5,067	50,821		50,821	19,047	3,512	22,559		22,559	28,262
Farview	38,900	2,794	41,694		41,694	26,380	3,790	30,170		30,170	11,524
Fort Macleod	8,567	65,055	73,622		73,622	6,662	2,483	9,145		9,145	64,477
Fort Vermilion	41,725	2,970	44,695		44,695	19,192	3,352	22,544		22,544	22,151
Galahad	65,329	2,574	67,903		67,903	16,301	4,533	20,834		20,834	47,069
Grande Prairie	88,195	71,605	159,800		159,800	55,166	5,231	60,397		60,397	99,403
Hanna	55,914	6,960	62,874		62,874	26,704	1,601	28,305		28,305	34,569
High Prairie	67,020	7,496	74,516	4,494	70,022	37,900	5,528	43,428	2,715	40,713	29,309
High River	98,393	2,776	101,169		100,399	51,615	5,020	56,635		56,635	43,764
Lacombe	43,257	5,325	48,582	3,481	45,101	42,627	2,122	44,749	11,135	33,614	11,487
Le Lac Biche	65,637	4,760	70,397		70,397	10,227	4,823	15,050		15,050	55,347
McLean	95,035	12,334	107,369	5,668	101,701	27,041	7,993	35,034	552	34,482	67,219
Olds	77,101	3,330	80,431		80,431	37,756	3,198	40,954		40,954	39,477
Peace River	45,956	1,976	47,962		47,962	26,448	2,982	29,440		29,440	18,522
Pincher Creek	76,252	694	76,946		76,946	19,111	7,492	26,603		26,603	70,343
Ponoka	43,568	2,485	46,053		46,053	51,265	7,484	58,749		58,749	16,427
Rocky Mountain House	43,958	2,467	46,425		46,425	24,426	4,308	28,734		28,734	17,231
Spirit River	67,092	7,693	74,785		69,988	16,302	5,216	21,518		21,518	48,470
Stettler	62,753	4,893	67,646		64,752	19,172	4,169	23,341		23,341	44,341
St. Paul	126,224	2,397	128,621		128,621	51,149	12,855	64,315		46,259	31,401
Taber	55,627	4,939	60,566		55,566	71,480	13,833	84,315		84,315	41,306
Tofield	57,427	13,150	70,577	4,035	66,542	53,350	3,444	56,794		54,825	30,741
Trochu	54,457	4,672	59,129		59,129	49,263	2,694	44,957	2,213	42,744	17,385
Two Hills	137,110	3,266	140,376	218	140,158	103,900	8,952	112,852		112,852	27,526
Vegreville	78,086	8,351	86,437		81,437	43,715	8,145	51,860		51,860	34,577
Vermilion	66,425	7,346	73,771		73,771	32,648	5,049	37,697		37,697	36,074
Wiking	68,850	7,551	76,401	235	76,166	58,820	5,299	64,119		64,119	12,279
Wulcan	60,459	6,778	67,237		67,237	33,396	4,072	37,468		37,468	29,769
Wainwright	149,826	4,797	154,623		154,623	74,132	10,585	84,717		84,717	69,906
Wetlock											
Wetaskiwin	69,453	13,147	82,600	13,031	69,569	37,099	4,814	41,913	11,713	30,200	39,369
Total	2,968,670	403,591	3,372,261	58,806	3,313,455	1,499,866	230,646	1,730,312	45,289	1,685,023	1,628,432

90 - 179 BEDS

Calgary Crippled Children's†	9 610	647	10,257	9,940	10,257	9,138	94,526	2,911	91,615	10,257
Camrose	133,113	22,799	155,912	.....	145,972	.....	25,796	.....	25,796	54,357
Drumheller	66,725	2,150	68,875	.....	111,920	.....	17,510	.....	17,510	43,079
Lamont	89,064	12,856	111,920	.....	196,379	.....	129,313	.....	129,313	94,410
Red Deer	191,402	4,977	196,379	.....	.....	.....	.....	.....	.....	67,066
Total	499,914	43,429	543,343	9,940	533,403	234,024	33,121	267,145	2,911	264,234
180 BEDS AND OVER										
Calgary Holy Cross	690,654	40,753	731,407	1,765	729,642	115,649	44,798	160,447	249	160,198
Edmonton General	768,692	33,479	802,111	3,650	798,461	238,100	55,132	293,232	2,047	291,185
Edmonton Misericordia	453,201	13,618	466,819	.....	466,819	161,972	37,346	199,318	.....	199,318
Edmonton Royal Alexandra†	538,430	185,704	722,134	.....	722,134	.....	.....	.....	.....	722,134
Edmonton University†	1,696,602	217,427	1,914,029	7,930	1,906,099	82,602	34,649	117,251	45	1,906,099
Lethbridge Municipal	454,408	5,761	460,169	350	459,819	227,385	36,201	263,586	.....	342,613
Lethbridge St. Michael's	423,765	49,225	472,990	155	472,835	8,081	28,507	36,588	.....	263,586
Medicine Hat	441,758	47,496	489,254	1,275	487,979	.....	.....	.....	.....	36,588
Total	5,465,450	593,463	6,058,913	15,125	6,043,788	833,789	236,633	1,070,422	2,341	1,068,081
GRAND TOTAL	10,172,442	1,187,724	11,360,166	103,816	11,256,350	3,234,963	601,959	3,836,922	70,917	3,766,005
										7,490,344

*Excluding Devon and Calgary General.

†Depreciation not available.

PART III

ANNUAL REPORT

OF THE

Bureau of Vital Statistics

OF THE

**DEPARTMENT OF PUBLIC HEALTH
PROVINCE OF ALBERTA**

1958

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BUREAU OF VITAL STATISTICS

JOHN COLVILLE, *Deputy Registrar General*

The Vital Statistics for the Province of Alberta for the year 1958 show slight decreases in the birth, marriage, death and infantile death rates, and a slight increase in the maternal death rate.

POPULATION

The population of the Province of Alberta for the year 1958 has been estimated by the Dominion Bureau of Statistics as 1,201,000. All rates in this report are, therefore, based on that figure.

BIRTHS

There were 36,842 children born to residents of the Province during the year of which 1,636 were Indians. The birth rate of 30.7 per 1,000 population is a decrease of .1 under last year's rate and 3.1 more than the rate for all of Canada. Of the total births 19,000 were males and 17,842 females, the ratio being 1,064 males to 1,000 females. Multiple births comprised 1 set of triplets and 398 sets of twins. Illegitimate births registered during the year numbered 1,896 an increase of 86 over the previous year. The rate of 5.1 per 100 live births is practically the same as that for the previous year. The excellent maternity hospitalization provided in the Province is reflected in 97.7% of the births occurring in hospitals. Eighty-six per cent or 31,763 births occurred in urban centres of 1,000 population and over.

The number of births registered in the cities of the Province were as follows: Calgary, 8,036; Camrose, 384; Drumheller, 306; Edmonton, 12,077; Grande Prairie, 515; Lethbridge, 1,441; Medicine Hat, 869; Red Deer, 810 and Wetaskiwin, 322.

For the purpose of comparison the following are the recent birth rates for Canada and certain other countries:

Canada	27.6	United States	24.3
Newfoundland	33.8	Australia	22.6
Prince Edward Island	25.8	New Zealand	25.2
Nova Scotia	26.6	Denmark	16.5
New Brunswick	28.4	Finland	18.5
Quebec	29.0	France	18.1
Ontario	26.3	Italy	17.4
Manitoba	24.9	Austria	16.9
Saskatchewan	26.9	Norway	18.1
Alberta	30.7	Netherlands	21.2
British Columbia	25.6	Portugal	23.1
England and Wales	16.4	Spain	21.8
Scotland	19.2	Sweden	14.3
Northern Ireland	21.6	Switzerland	17.4
Ireland (Republic)	20.9	Western Germany	17.0

MARRIAGES

During the year 10,186 marriages were registered being 69 more than for 1957 and the highest number ever registered in the history of the Province. The marriage rate of 8.5 per 1,000 population is slightly below the rate for the previous year, how-

ever as the rate for Canada has been declining for the past decade, Alberta for another year has maintained her position as having the highest marriage rate for the provinces of Canada.

Of the 10,186 marriages 380 brides were 16 years of age and under; 3,025 were between the ages of 17 and 19; 4,069 were between the ages of 20 and 24, and 10 were 75 years and over. There were 186 bridegrooms 18 years of age and under; 5,001 were between the ages of 19 and 24, and 33 were 75 years and over. Of the brides, 9,084 were spinsters; 502 widows; 600 divorced and of the grooms 9,282 were bachelors; 388 widowers and 516 divorced.

The number of marriages registered in the cities of the Province were as follows: Calgary, 2,249; Camrose, 75; Drumheller, 60; Edmonton, 3,141; Grande Prairie, 92; Lethbridge, 361; Medicine Hat, 251; Red Deer, 218 and Wetaskiwin, 80.

The following table shows the marriage rates for Canada and certain other countries:

Canada	7.7	United States	8.3
Newfoundland	7.0	Australia	7.5
Prince Edward Island	6.2	New Zealand	8.0
Nova Scotia	7.2	Denmark	7.2
New Brunswick	7.2	Finland	7.2
Quebec	7.4	France	7.0
Ontario	8.1	Italy	7.4
Manitoba	7.4	Austria	7.9
Saskatchewan	7.3	Norway	6.7
Alberta	8.5	Netherlands	8.2
British Columbia	7.8	Portugal	8.3
England and Wales	7.5	Spain	8.4
Scotland	8.0	Sweden	6.7
Northern Ireland	6.6	Switzerland	7.7
Ireland (Republic)	5.3	Western Germany	9.1

DIVORCES

There were 743 Divorces granted during the year; 293 were granted to husbands and 450 to wives. Nine Decrees of Nullity were also granted; 2 were granted to husbands and 7 to wives. The number of Divorces and Nullities has been on the increase for the past several years.

DEATHS

For the last consecutive five years Alberta has held the lowest death rate in Canada. The rate for 1958 is 6.9 per 1,000 population and this is the second lowest in the history of the Province.

The number of deaths registered during the year was 8,237 of which 5,254 were males and 2,983 females, the ratio between the sexes being 1,761 males to 1,000 females. The deaths of 262 Indians are included in the total. Of the total deaths 11.3% were decedents under 1 year of age; 3.4% between 1 and 14 years; 29.4% between 15 and 64 years; 55.8%, 65 years and over, and 70% of all deaths occurred in hospital.

The number of Deaths registered in the cities of the Province were as follows: Calgary, 1,713; Camrose, 202; Drumheller, 64; Edmonton, 2,165; Grande Prairie, 86; Lethbridge, 288; Medicine Hat, 235; Red Deer, 119 and Wetaskiwin, 80.

Heart Disease is still the most frequent cause of death and in 1958 was responsible for 2,431 deaths, an increase of 60 over the previous year. The rate per 100,000 population was 202 as compared to 204 for 1957. Cancer was the second most important cause and accounted for 1,304 deaths, an increase of 42 over the previous year. The rate of 108 deaths per 100,000 population was the same as for 1957. Vascular lesions affecting the central nervous system was the third leading cause and took 930 lives, a decrease of 9 under last year. The rate per 100,000 population was 77 as compared to 80 for 1957. There was a gratifying decrease in deaths from Tuberculosis, the number being 35 as compared to 60 for the previous year. Deaths from Diabetes declined from 141 in 1957 to 119. Declines were also recorded in the number of deaths from Pneumonia (all forms) and Influenza, the former accounted for 338 as compared to 352 for 1957, and the latter for 21 as compared to 135. The number of deaths due to Poliomyelitis and Encephalitis, was 8, the same as in the previous year.

There was an alarming increase in the number of violent and accidental deaths, 816 were recorded as compared to 745 for the previous year. In this group deaths from motor vehicle accidents pretty well accounted for the full increase, 301 deaths were registered as against 247 for 1957. Other violent and accidental deaths recorded were as follows: Other transport accidents, 37; accidental poisoning, 32; accidental falls, 86; accidents caused by machinery, 30; accidents caused by fire and explosion of combustible material, 34; accidents caused by hot substance, corrosive liquid, steam and radiation, 4; accidents caused by firearms, 14; accidental drownings and submersions, 54; all other accidental causes, 90; suicides, 111; homicides, 26.

The Death Rates for Canada, the Provinces and certain other countries are as follows:

Canada	7.9	United States	9.5
Newfoundland	7.1	Australia	8.5
Prince Edward Island	9.5	New Zealand	8.9
Nova Scotia	8.6	Denmark	9.2
New Brunswick	7.8	Finland	8.9
Quebec	7.3	France	11.2
Ontario	8.4	Italy	9.1
Manitoba	8.2	Austria	12.2
Saskatchewan	7.3	Norway	8.9
Alberta	6.9	Netherlands	7.5
British Columbia	8.9	Portugal	10.2
England and Wales	11.7	Spain	8.7
Scotland	12.0	Sweden	9.6
Northern Ireland	10.8	Switzerland	9.5
Ireland (Republic)	12.0	Western Germany	10.8

MATERNAL DEATHS

Puerperal deaths numbered 17 an increase of 5 over the previous year. The rate per 1,000 livebirths is 0.5 which compares favourably with the rate for Canada of 0.6.

MATERNAL DEATH RATES PER 1,000 LIVE BIRTHS

Canada	0.6	Ontario	0.5
Newfoundland	0.9	Manitoba	0.6
Prince Edward Island	0.4	Saskatchewan	0.5
Nova Scotia	0.7	Alberta	0.5
New Brunswick	0.5	British Columbia	0.4
Quebec	0.7		

INFANT DEATHS

During the year 932 deaths of children under one year of age were registered, a decrease of 31 under the previous year. Of the total deaths 548 were males and 384 females. The rate was 25 per 1,000 live births and Alberta shares with the Province of Ontario the lowest rate in Canada.

INFANT MORTALITY RATES PER 1,000 LIVE BIRTHS

Canada	30	United States	27
Newfoundland	39	Australia	(1957) 21
Prince Edward Island	33	New Zealand	19
Nova Scotia	29	Denmark	(1957) 23
New Brunswick	35	Finland	24
Quebec	36	France	32
Ontario	25	Italy	48
Manitoba	30	Austria	41
Saskatchewan	26	Norway	(1957) 20
Alberta	25	Netherlands	17
British Columbia	27	Portugal	84
England and Wales	23	Spain	42
Scotland	28	Sweden	16
Northern Ireland	28	Switzerland	22
Ireland (Republic)	35	Western Germany	36

The number of stillbirths registered was 395, a decline of 10 under the previous year. Of the total stillbirths 227 were male and 168 female. The rate was 10.7 per 1,000 livebirths which compares very favourably with the rate for Canada of 14.3. During the year 82,203 certificates were issued comprising 60,665 births, 17,334 marriages and 4,204 deaths, the births of 131 children were legitimated by the subsequent marriage of their parents; 1,212 adoptions, 749 Change of Christian Name, 347 Legal Change of name recorded and 131 delayed registrations of birth filed.

DIVISIONS OF ALBERTA FOR CENSUS AND VITAL STATISTICS PURPOSES

As the Province of Alberta is not divided into Counties, and the political divisions are not permanently fixed, it has been found advisable to use smaller areas, the Dominion Census Divisions.

Prior to 1956 the Province was divided into 17 census divisions. However in 1956 the census division boundaries were completely revised and there are now 15 census divisions. These divisions are further sub-divided into municipal areas. The municipal areas which were each originally within the boundaries of a single census division, have been reorganized by the Provincial authorities into larger units, and now, in many cases, part of the new municipality or improvement district is in one census division and part in another.

The following table shows the census divisions divided into municipalities, improvement districts, cities, towns and villages with the 1956 and 1951 division population figures.

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES
FOR CENSUS YEARS, 1951 AND 1956

Division and Subdivision	Total		Division and Subdivision	Total	
	1956	1951		1956	1951
ALBERTA	1,123,116	939,501	Division No. 5—Continued:		
Division No. 1	34,496	28,317	Cities:		
2. Forty Mile	4,224	3,924	Drumheller	2,632	2,601
11. I.D.—D.A.	4,076	4,025	Towns:		
22. I.D.—D.A.	592	563	Gleichen	581	430
Army Experimental Range	863	533	Strathmore	727	704
Cities:			Three Hills	1,095	1,026
Medicine Hat	20,826	16,364	Vulcan	1,204	1,040
Towns:			Villages:		
Bow Island	1,001	653	Acme	292	275
Irvine	232	224	Arrowwood	240	222
Redcliff	2,001	1,538	Carbon	354	374
Villages:			Carmanagay	299	285
Burdett	225	118	Champion	402	378
Foremost	456	375	Cluny	197	202
Division No. 2	74,991	67,694	Craigmyle	138	136
14. Taber	6,730	6,157	Delia	282	278
25. Lethbridge	11,624	13,857	Hussar	168	120
Newell County No. 4	5,943	7,023	Lomond	189	153
Warner County No. 5	5,157	5,322	Milo	167	141
Cities:			Morrin	267	226
Lethbridge	29,462	22,947	Munson	82	78
Towns:			Rockyford	226	246
Bassano	753	624	Rumsey	104	110
Brooks	2,320	1,648	Standard	230	237
Coaldale	2,327	806	Trochu	680	630
Milk River	642	481	Division No. 6	237,886	177,441
Raymond	2,399	2,279	31. Foothills	7,902	8,100
Taber	3,688	3,042	44. Rocky View	12,788	14,770
Villages:			46. I.D.—D.A.	4,650	1,390
Barons	352	369	49. Mountain View	9,273	9,497
Duchess	177	258	Indian Reserves	478	385
Grassy Lake	282	167	Cities:		
Nobleford	263	255	Calgary	181,780	129,060
Picture Butte	881	865	Towns:		
Rosemary	158	—	Black Diamond	991	1,154
Stirling	430	520	Bowness	6,217	2,922
Tilley	240	259	Didsbury	1,227	1,180
Vauxhall	713	393	Forest Lawn	3,150	1,079
Warner	450	422	High River	2,102	1,858
Division No. 3	30,426	27,667	Okotoks	764	767
6. Cardston	5,398	6,293	Olds	1,980	1,617
9. Pincher Creek	3,109	3,215	Sundre	923	337
26. Willow Creek	6,344	5,166	Villages:		
Indian Reserves	3,524	2,555	Airdrie	327	267
Towns:			Beiseker	321	325
Cardston	2,607	2,487	Blackie	198	224
Claresholm	2,431	1,608	Carstairs	449	468
Fort Macleod	2,103	1,860	Cayley	146	139
Granum	322	327	Cochrane	707	530
Magrath	1,382	1,320	Cremona	192	—
Nanton	1,047	934	Crossfield	459	443
Pincher Creek	1,729	1,456	Irricana	158	180
Stavelly	338	327	Turner Valley	704	719
Villages:			Division No. 7	40,214	40,217
Cowley	92	119	52. Provost	3,621	3,751
Division No. 4	14,294	13,182	53. Paintearth	3,515	3,462
34. Acadia	914	705	61. Wainwright	4,481	4,690
Special Area No. 2	3,687	3,590	62. Flagstaff	6,806	7,194
Special Area No. 3	5,036	4,811	Stettler County No. 6	6,061	6,059
Towns:			Buffalo National Park	604	2,708
Hanna	2,327	2,027	Towns:		
Cereal	154	135	Castor	958	798
Chinook	154	116	Coronation	784	738
Consort	434	396	Daysland	499	475
Empress	480	411	Hardisty	628	536
Oyen	562	433	Provost	878	676
Veteran	241	206	Stettler	3,359	2,442
Youngstown	305	352	Wainwright	2,653	1,996
Division No. 5	38,120	39,055	Villages:		
40. Wheatland	5,582	5,779	Alliance	313	281
42. I.D.—D.A.	5,502	6,925	Amisk	151	—
47. Starland	2,831	2,891	Big Valley	354	307
48. Kneehill	7,055	7,174	Botha	102	98
Vulcan County No. 2	5,087	5,094	Chauvin	353	340
Indian Reserves	1,507	1,300	Czar	153	123
			Donalda	256	318
			Edgerton	292	309
			Forestburg	552	443
			Gadsby	145	128
			Galahad	215	198

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES
FOR CENSUS YEARS, 1951 AND 1956 (Continued)

Division and Subdivision	Total		Division and Subdivision	Total	
	1956	1951		1956	1951
Division No. 7—Continued:			Division No. 10—Continued:		
Villages—Continued:			Bawlf	287	236
Halkirk	209	148	Bittern Lake	45	25
Hughenden	212	218	Bruderheim	290	387
Irma	421	369	Chipman	192	180
Killam	524	465	Derwent	289	233
Lougheed	201	186	Edberg	167	188
Sedgewick	608	485	Ferintosh	195	205
Strome	306	276	Hairy Hill	183	205
Division No. 8	64,168	57,513	Hay Lakes	193	231
55. Red Deer	12,830	12,243	Holden	544	504
64. Lacombe	8,351	8,612	Innisfree	318	287
65. I.D.—D.A.	5,199	6,066	Kitsooty	283	235
68. I.D.—D.A.	81	194	Lamont	632	637
Ponoka County No. 3	8,611	9,139	Lavoy	127	122
Indian Reserves	1,230	1,129	Mannville	599	528
Cities:			Marwayne	337	.....
Red Deer	12,338	7,575	Minburn	150	186
Towns:			Myrnam	440	388
Innisfail	1,883	1,417	New Norway	273	258
Lacombe	2,747	2,277	Ryley	495	406
Ponoka	3,387	2,574	Willington	431	281
Rimbeay	980	757			
Rocky Mountain House	1,285	1,147	Division No. 11	323,539	235,475
Sylvan Lake	1,114	985	74. Wetaskiwin	9,466	8,222
Villages:			75. Leduc	11,497	12,526
Alix	517	461	77. I.D.—D.A.	3,259	1,310
Bentley	536	439	83. Strathcona	8,873	7,591
Blackfalds	340	154	84. Stony Plain	8,491	8,962
Bowden	296	277	90. Sturgeon River	13,865	11,174
Caroline	296	.....	Indian Reserves	1,786	1,208
Clive	249	241	Cities:		
Delburne	429	395	Edmonton	226,002	159,631
Eckville	456	379	Wetaskiwin	4,476	3,824
Elnora	177	211	Towns:		
Gull Lake	32	32	Beverly	4,602	2,159
Mirror	591	635	Calmar	730	944
Penhold	213	174	Devon	1,429	842
Division No. 9	17,239	19,496	Drayton Valley	2,588	.....
8. I.D.—D.A.	110	167	Fort Saskatchewan	2,582	1,076
10. I.D.—D.A.	3,269	4,706	Jasper Place	15,957	9,139
27. I.D.—D.A.	109	125	Leduc	2,008	1,842
33. I.D.—D.A.	47	31	Morinville	957	892
50. I.D.—D.A.	75	71	St. Albert	1,320	1,129
58. I.D.—D.A.	429	443	Stony Plain	1,098	878
69. I.D.—D.A.	152	1,223	Villages:		
946. I.D.—D.A.	2,456	2,630	Entwistle	354	.....
Banff National Park	3,069	2,856	Itaska Beach	2	.....
Banff (not incorp.)	2,518	2,357	Lakeview	41	15
Jasper National Park	2,322	1,899	Legal	457	523
Jasper (not incorp.)	2,105	1,728	Ma-Me-O Beach	137	.....
Waterton Lakes			Millet	427	402
National Park	277	238	Seba Beach	141	103
Indian Reserves	1,173	974	Silver Beach	17	.....
Towns:			Spruce Grove	309	.....
Blairmore	1,973	1,933	Thorsby	411	385
Coleman	1,566	1,961	Warburg	257	.....
Villages:					
Frank	221	239	Division No. 12	44,947	39,886
Division No. 10	71,500	70,677	85. I.D.—D.A.	348	208
63. Camrose	9,626	10,457	86. St. Paul	7,979	9,041
71. Vermilion River	9,557	9,663	87. Bonnyville	10,058	6,744
72. Minburn	6,742	7,312	89. Smoky Lake	5,517	6,292
73. Beaver	6,883	7,202	101. I.D.—D.A.	2,039	2,235
81. Eagle	7,114	7,722	102. I.D.—D.A.	5,066	5,115
82. Lamont	7,700	8,778	121. I.D.—D.A.	197	274
Elk Island National Park	56	55	143. I.D.—D.A.	879	835
Cities:			Wood Buffalo National Park (pt.)	143	36
Camrose	5,817	4,131	Indian Reserves	3,530	3,168
Towns:			Towns:		
Lloydminster (pt.)	2,506	1,706	Bonnyville	1,495	1,139
Mundare	650	596	Cold Lake	1,097	.....
Tofield	800	692	Lac La Biche	967	905
Two Hills	713	525	McMurray	1,110	926
Vegreville	2,574	2,223	St. Paul	2,229	1,407
Vermilion	2,196	1,982	Villages:		
Viking	897	683	Elk Point	594	453
Villages:			Glendon	314	.....
Andrew	602	625	Smoky Lake	563	491
Bashaw	597	603	Vilna	374	378
			Warspite	159	.....
			Waskatenau	289	239

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY MUNICIPALITIES
FOR CENSUS YEARS, 1951 AND 1956 (Continued)

Division and Subdivision	Total		Division and Subdivision	Total	
	1956	1951		1956	1951
Division No. 13	45,033	46,638	Division No. 15—Continued:		
92. Westlock	8,731	8,795	128. I.D.—D.A.	947	593
93. Lac Ste. Anne	6,892	7,282	129. I.D.—D.A.	877	502
103. Athabasca	7,367	8,200	130. Smoky River	3,955	4,374
106. Barrhead	5,944	6,501	131. I.D.—D.A.	2,413	2,058
107. I.D.—D.A.	1,502	1,699	132. I.D.—D.A.	3,133	2,927
108. I.D.—D.A.	781	770	133. Spirit River	1,413	1,406
122. I.D.—D.A.	557	550	134. I.D.—D.A.	2,633	2,618
Thorhild County No. 7 ...	5,596	6,174	135. Peace	1,732	1,741
Indian Reserves	332	279	136. Fairview	1,885	2,031
Towns:			137. I.D.—D.A.	127	124
Athabasca	1,293	1,068	138. I.D.—D.A.	3,489	4,210
Barrhead	1,610	1,243	139. I.D.—D.A.	2,635	3,007
Redwater	1,065	1,306	144. I.D.—D.A.	26	115
Westlock	1,136	1,111	145. I.D.—D.A.	136	158
Villages:			146. I.D.—D.A.	634	754
Alberta Beach	127	79	147. I.D.—D.A.	2,500	1,589
Boyle	304	.....	149. I.D.—D.A.	122	39
Clyde	221	219	Grande Prairie County		
Mayerthorpe	563	472	No. 1	8,899	10,126
Onoway	190	189	Indian Reserves	3,032	3,254
Radway	203	184	Towns:		
Sangudo	331	269	Beaverlodge	768	514
Thorhild	288	248	Fairview	1,260	929
Division No. 14	15,846	14,443	Falher	802	575
78. I.D.—D.A.	3,444	3,724	Grande Prairie	6,302	2,664
79. I.D.—D.A.	2,234	3,992	Grimshaw	904	564
95. I.D.—D.A.	4,696	2,561	High Prairie	1,743	1,141
96. I.D.—D.A.	314	299	McLennan	1,092	1,074
109. I.D.—D.A.	1,693	1,506	Peace River	2,034	1,672
Towns:			Spirit River	743	553
Edson	2,560	1,956	Villages:		
Villages:			Berwyn	342	288
Evansburg	358	.....	Donnelly	265	.....
Wildwood	547	405	Girouxville	300	.....
Division No. 15	70,417	61,800	Hines Creek	360	.....
110. I.D.—D.A.	346	73	Hythe	481	342
111. I.D.—D.A.	241	324	Kinuso	306	238
123. I.D.—D.A.	2	1	Manning	726	.....
124. I.D.—D.A.	3,216	2,853	Rycroft	424	372
125. I.D.—D.A.	3,155	3,277	Sexsmith	345	331
126. I.D.—D.A.	2,427	2,138	Valleyview	973	.....
			Wembley	272	251

TABLE 1—GENERAL SUMMARY OF VITAL STATISTICS FOR CENSUS DIVISIONS, ALBERTA, 1958

CENSUS DIVISIONS	LIVE BIRTHS			Live Births in Hospitals	Illegitimate Births	Stillbirths	Marriages	Excess Births Over Deaths	Total Deaths	Hospital Deaths	Infant Deaths	Neo-natal Deaths	Maternal Deaths
	Total	Male	Female										
ALBERTA	36842	19000	17842	36003	1896	395	10186	28605	8237	5797	932	610	17
Division No. 1	975	488	487	957	25	13	276	690	285	199	19	13	.....
Division No. 2	2196	1140	1056	2141	65	21	618	1739	457	346	38	32	1
Division No. 3	965	495	470	927	78	14	257	726	239	165	36	18	.....
Division No. 4	445	239	206	432	5	4	65	333	114	96	10	6	1
Division No. 5	954	510	444	922	42	7	219	642	312	201	37	24	.....
Division No. 6	8447	4428	4019	8412	431	98	2529	6473	1974	1309	208	144	.....
Division No. 7	1065	510	555	1056	31	17	260	752	313	225	38	24	2
Division No. 8	2055	1054	1001	2027	121	22	555	1540	515	369	57	39	.....
Division No. 9	409	217	192	387	38	9	163	275	134	95	16	7	1
Division No. 10	1624	821	803	1614	38	19	513	1093	531	393	32	25	1
Division No. 11	11978	6179	5799	11948	566	107	3612	9749	2229	1673	281	191	5
Division No. 12	1618	821	797	1329	138	23	331	1311	307	201	57	27	1
Division No. 13	1081	556	525	1054	58	10	238	797	284	183	17	8	1
Division No. 14	611	301	310	592	32	4	88	521	90	56	14	10	.....
Division No. 15	2419	1241	1178	2205	228	27	462	1966	453	292	71	44	3

TABLE 2—GENERAL SUMMARY OF VITAL STATISTICS FOR INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1958

CITY, TOWN OR VILLAGE	LIVE BIRTHS			Live Births in Hospitals	Illegitimate Births	Stillbirths	Marriages	Excess Births Over Deaths	Total Deaths	Hospital Deaths	Infant Deaths	Neo-natal Deaths	Maternal Deaths
	Total	Male	Female										
Athabasca	57	27	30	56	5	1	40	35	22	18	5	1	.....
Barrhead	51	23	28	50	1	.....	50	38	13	10	.....	.....	.....
Beverly	352	186	166	352	7	4	328	24	24	16	4	1	.....
Blairmore	38	16	22	37	1	1	23	15	13	9	2	.....	.....
Bonnyville	76	36	40	76	2	5	22	66	10	10	3	3	.....
Bow Island	25	8	17	25	.....	.....	7	14	11	.....	.....	.....	.....
Bowness	284	152	132	284	12	8	32	254	30	17	2	.....	.....
Brooks	80	46	34	80	2	1	31	54	26	18	7	5	.....
Calgary	6737	3521	3216	6730	371	73	2249	5155	1582	1064	171	121	1
Camrose	154	79	75	154	3	3	75	88	66	49	1	.....	.....
Cardston	90	49	41	90	3	2	128	69	21	15	2	.....	.....
Clareholm	80	43	37	80	2	2	21	50	30	25	1	.....	.....
Coaldale	75	34	41	74	4	.....	32	56	19	16	3	2	.....
Cold Lake	81	42	39	72	9	2	8	74	7	6	4	2	.....
Coleman	39	20	19	39	2	1	15	10	29	24	2	1	.....
Devon	40	20	20	40	.....	.....	2	33	7	6	2	2	.....
Didsbury	45	22	23	45	3	.....	22	30	15	12	1	.....	.....
Drayton Valley	203	98	105	202	2	.....	17	190	13	8	7	4	.....
Drumheller	114	66	48	114	6	1	60	81	33	26	3	.....	.....
Edmonton	8570	4444	4126	8560	474	72	3141	6963	1607	1269	198	137	2
Edson	140	74	66	139	10	2	50	110	30	19	4	.....	.....
Fairview	61	35	26	61	1	.....	40	49	12	8	4	3	.....
Forest Lawn	150	89	61	150	2	.....	12	136	14	10	1	.....	.....
Fort Macleod	86	37	49	86	2	2	27	63	23	18	7	2	.....
Fort Saskatchewan	108	50	58	108	4	.....	11	91	17	10	3	3	.....
Grande Prairie	311	170	141	309	15	3	92	269	42	30	.....	.....	.....
Hanna	75	40	35	75	2	2	28	75	31	27	3	.....	.....
High Prairie	83	38	45	82	6	1	26	72	11	9	3	2	.....
High River	50	33	17	50	2	2	36	15	35	25	.....	.....	.....
Innisfail	87	41	46	86	1	.....	31	62	25	16	2	2	.....
Jasper Place	847	431	416	847	26	8	18	769	78	61	24	17	.....
Lacombe	101	54	47	101	3	3	58	50	51	40	4	3	.....
Leduc	82	45	37	82	2	.....	33	61	21	13	2	.....	.....
Lethbridge	921	478	443	921	33	7	361	688	233	191	15	14	1
Lloydminster	134	67	67	134	2	.....	86	112	22	15	3	2	.....
Magrath	34	18	16	33	2	.....	9	123	11	7	1	.....	.....
McLennan	42	21	21	42	2	1	12	32	10	10	1	.....	.....
McMurray	22	11	11	22	7	.....	3	15	7	4	3	2	.....
Medicine Hat	587	283	304	586	20	8	251	381	206	147	8	6	.....
Nanton	27	10	17	27	1	1	9	16	11	7	.....	.....	.....
Olds	81	41	40	81	.....	.....	35	57	24	17	3	2	.....
Peace River	132	67	65	132	15	.....	33	118	14	11	3	2	.....
Pincher Creek	100	45	55	98	3	.....	22	73	27	24	7	4	.....
Ponoka	116	53	63	116	7	1	58	77	39	33	9	6	.....
Raymond	43	20	23	41	3	.....	12	32	11	7	1	.....	.....
Redcliff	56	33	23	56	.....	2	7	36	20	14	5	4	.....
Red Deer	605	302	303	605	16	6	218	494	111	85	8	6	.....
Redwater	45	21	24	45	.....	.....	5	39	6	2	.....	.....	.....
Rocky Mountain House	90	50	40	85	12	.....	23	63	27	21	6	6	.....
St. Albert	65	40	25	65	1	.....	8	50	15	6	1	.....	.....
St. Paul	97	51	46	97	4	.....	51	83	14	10	1	.....	.....
Stettler	122	54	68	122	8	3	53	80	42	37	6	5	1
Stony Plain	53	27	26	52	4	1	22	40	13	9	.....	.....	.....
Sylvan Lake	45	21	24	45	5	.....	13	35	10	4	.....	.....	.....
Taber	131	73	58	131	8	.....	71	105	26	20	3	3	.....
Three Hills	50	22	28	49	2	.....	15	34	16	12	1	1	.....
Vegreville	68	33	35	68	3	.....	46	68	25	19	3	3	.....
Vermilion	68	39	29	67	4	2	39	50	18	15	.....	.....	.....
Vulcan	39	20	19	39	3	.....	18	27	12	10	1	1	.....
Wainwright	143	60	83	142	8	.....	30	110	33	26	6	4	.....
Westlock	54	28	26	54	1	.....	25	38	16	11	.....	.....	.....
Wetaskiwin	124	69	55	124	4	3	80	70	54	39	4	2	.....

TABLE 3—DEATHS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, 1958

PLACE OF OCCURRENCE	Total (Occurrence)	PLACE OF RESIDENCE													
		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.	U.S.A.	Other
Total (residence)	135899	3122	949	6120	4528	35774	48677	7145	6483	8237	13741	92	333	629	69
Newfoundland	3136	3106	.....	5	2	2	1	.....	.....	.....	.....	.....	.....	16	4
Prince Edward Island	941	932	.....	3	2	1	.....	.....	.....	1	.....	.....	.....	2	.....
Nova Scotia	6126	6	8	6058	15	5	11	.....	1	2	2	.....	.....	14	4
New Brunswick	4597	2	2	13	4432	51	10	.....	3	2	2	.....	.....	82	3
Quebec	35506	3	2	5	25	35233	135	4	3	3	1	3	.....	69	20
Ontario	48926	3	3	19	17	353	48114	30	15	7	19	.....	3	323	20
Manitoba	7190	.....	1	.....	.....	3	63	7014	42	9	10	.....	16	29	3
Saskatchewan	6460	.....	.....	1	1	.....	12	30	6329	58	18	.....	1	8	2
Alberta	8237	.....	.....	1	1	.....	19	13	35	8069	50	4	14	27	5
British Columbia	13721	1	.....	1	2	3	7	12	34	44	13550	3	1	55	8
Yukon	92	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	85	.....	3	.....
N. W. T.	309	.....	.....	.....	.....	.....	4	1	.....	8	1	.....	294	1	.....
U.S.A.	658	1	1	15	31	123	301	41	24	36	84	.....	1	.....	.....

TABLE 4—DEATHS AND HOSPITAL DEATHS BY OCCURRENCE AND RESIDENCE
FOR CENSUS DIVISIONS, ALBERTA, 1958

CENSUS DIVISIONS	TOTAL DEATHS				DEATHS IN HOSPITAL			
	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere
ALBERTA	8237	8237	168	168	5787	5797	97	108
Division No. 1	266	285	23	42	178	199	17	38
Division No. 2	452	457	49	54	340	346	37	43
Division No. 3	184	239	19	64	127	165	9	47
Division No. 4	107	114	17	24	78	90	10	22
Division No. 5	247	312	23	88	133	201	11	79
Division No. 6	2029	1974	208	153	1362	1309	165	112
Division No. 7	257	313	22	78	172	225	13	66
Division No. 8	533	515	111	93	385	369	98	82
Division No. 9	130	134	35	39	76	95	12	31
Division No. 10	525	531	129	135	380	393	104	117
Division No. 11	2552	2229	482	159	2026	1673	445	92
Division No. 12	246	307	18	79	146	201	13	68
Division No. 13	216	284	24	92	111	183	13	85
Division No. 14	62	90	10	38	22	56	2	36
Division No. 15	421	453	32	64	251	292	12	53

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TABLE 5—DEATHS AND HOSPITAL DEATHS BY OCCURRENCE AND RESIDENCE
IN URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1958

CITY, TOWN OR VILLAGE	TOTAL DEATHS				DEATHS IN HOSPITAL			
	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence: Residence Elsewhere	By Residence: Occurrence Elsewhere
Athabasca	40	22	25	7	30	18	19	7
Barrhead	28	13	17	2	26	10	17	1
Beverly	4	24	1	21	.....	16	.....	16
Blairmore	1	15	.....	14	.....	13	.....	13
Bonnyville	24	10	17	3	24	10	17	3
Bow Island .....	.....	11	.....	11	.....	11	.....	11
Bowness	12	30	5	23	2	17	2	17
Brooks	35	26	14	5	27	18	12	3
Calgary	1713	1582	287	156	1214	1064	251	101
Camrose	202	66	148	12	176	49	133	6
Cardston	25	21	10	6	20	15	9	4
Clareholm	35	30	15	10	33	25	13	5
Coaldale	17	19	5	7	16	16	5	5
Cold Lake	12	7	7	2	11	6	7	2
Coleman	4	29	.....	25	1	24	.....	23
Devon	3	7	1	5	1	6	.....	5
Didsbury	29	15	18	4	27	12	18	3
Drayton Valley	11	13	5	7	5	8	3	6
Drumheller	64	33	37	6	55	26	35	6
Edmonton	2165	1607	719	161	1863	1269	684	90
Edson	30	30	10	10	20	19	9	8
Fairview	20	12	9	1	15	8	8	1
Forest Lawn	3	14	1	12	.....	10	.....	10
Fort Macleod	22	23	8	9	16	18	6	8
Fort Saskatchewan	8	17	4	13	.....	10	.....	10
Grande Prairie	86	42	51	7	74	30	46	2
Hanna	45	31	23	9	42	27	22	7
High Prairie	30	11	21	2	29	9	21	1
High River	57	35	32	10	45	25	28	5
Innisfail	31	25	13	7	25	16	13	4
Jasper Place	10	78	3	71	1	61	1	61
Lacombe	76	51	39	14	62	40	35	13
Leduc	10	21	1	12	1	13	.....	12
Lethbridge	288	233	83	28	245	191	77	23
Lloydminster	6	22	.....	16	.....	15	.....	15
Magrath	13	11	5	3	8	7	4	3
McLennan	23	10	17	4	23	10	17	4
McMurray	6	7	3	4	4	4	2	2
Medicine Hat	235	206	56	27	178	147	52	21
Nanton	2	11	1	10	.....	7	.....	7
Olds	51	24	34	7	40	17	28	5
Peace River	23	14	14	5	18	11	12	5
Pincher Creek	43	27	23	7	40	24	22	6
Ponoka	116	39	88	11	110	33	88	11
Raymond	18	11	10	3	13	7	9	3
Redcliff	6	20	.....	14	.....	14	.....	14
Red Deer	119	111	33	25	97	85	29	17
Redwater	2	6	.....	4	.....	2	.....	2
Rocky Mountain House	28	27	8	7	22	21	7	6
St. Albert	25	15	16	6	.....	6	.....	6
St. Paul	27	14	16	3	23	10	15	2
Stettler	63	42	27	6	57	37	26	6
Stony Plain	5	13	1	9	.....	9	.....	9
Sylvan Lake	5	10	1	6	.....	4	.....	4
Taber	41	26	20	5	35	20	18	3
Three Hills	23	16	9	2	19	12	9	2
Vegreville	40	25	24	9	35	19	23	7
Vermilion	28	18	15	5	24	15	14	5
Vulcan	22	12	15	5	17	10	12	5
Wainwright	36	33	13	10	29	26	10	7
Westlock	32	16	20	4	26	11	19	4
Wetaskiwin	80	54	39	13	66	39	35	■

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1958

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No. 1	Division No. 2	Division No. 3	Division No. 4	Division No. 5	Division No. 6	Division No. 7	Division No. 8	Division No. 9	Division No. 10	Division No. 11	Division No. 12	Division No. 13	Division No. 14	Division No. 15
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
ALL CAUSES		8237	285	457	239	114	312	1974	313	515	134	531	2229	307	284	90	453
	Male	5254	183	290	161	80	218	1208	197	311	91	339	1437	189	193	64	293
	Female	2983	102	167	78	34	94	766	116	204	43	192	792	118	91	26	160
I. INFECTIVE AND PARASITIC DISEASES		93	3	6	4	15	3	4	5	3	11	5	3	3	8	7	1
	Male	61	1	4	2	13	2	4	2	3	17	5	6	1	1	1	5
	Female	32	2	2	2	2	2	1	1	2	2	2	14	5	2	1	2
A 1 Tuberculosis of respiratory system	Male	24	1	1	1	1	5	1	1	1	1	1	4	1	1	1	1
A 2 Tuberculosis of meninges and central nervous system	Female	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 4 Tuberculosis of bones and joints	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 5 Tuberculosis, all other forms	Female	4	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1
A 6 Congenital syphilis	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Female	4	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
A 9 General paralysis of insane	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 10 All other syphilis	Female	6	1	1	1	1	1	3	1	1	1	1	2	1	1	1	1
A 16 Dysentery, all forms	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Female	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 20 Septicaemia and pyaemia	Male	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 21 Diphtheria	Female	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 22 Whooping cough	Male	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Female	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 23 Meningococcal infections	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 28 Acute poliomyelitis	Female	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Male	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 29 Acute infectious encephalitis	Female	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Male	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 30 Late effects of acute poliomyelitis and acute infectious encephalitis	Female	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Male	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 32 Measles	Female	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Male	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 34 Infectious hepatitis	Female	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Male	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 43 All other diseases classified as infective and parasitic	Female	1333	45	88	23	19	49	332	51	82	20	91	369	33	50	20	61
	Male	808	27	46	14	13	31	181	35	52	15	60	223	18	35	15	43
	Female	525	18	42	9	6	18	151	16	30	5	31	146	15	15	5	18
II. NEOPLASMS		17	4	1	1	1	2	3	1	2	2	2	2	2	2	2	2
	Male	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 44 Malignant neoplasm of buccal cavity and pharynx	Female	16	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
A 45 Malignant neoplasm of oesophagus	Male	129	2	5	3	2	7	24	8	6	4	8	35	2	5	13	13
A 46 Malignant neoplasm of stomach	Female	57	2	9	2	2	10	3	1	1	4	14	4	2	2	5	5
A 47 Malignant neoplasm of intestine, except rectum	Male	62	3	2	2	3	15	2	4	1	3	17	2	1	2	1	1
A 48 Malignant neoplasm of rectum	Female	54	4	3	1	1	13	2	2	2	5	10	18	1	3	1	1
A 49 Malignant neoplasm of larynx	Male	19	2	1	1	1	4	2	2	1	1	4	10	1	1	1	1
	Female	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A 50 Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	Male	122	5	9	2	1	28	3	6	3	9	43	2	5	1	5	3
	Female	12	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1
A 51 Malignant neoplasm of breast	Male	95	7	6	2	1	5	23	3	9	1	33	1	1	1	1	2
	Female	29	2	2	1	1	1	1	1	1	1	10	1	1	1	1	1
A 52 Malignant neoplasm of cervix uteri	Female	23	1	1	1	1	1	8	1	1	1	2	4	1	2	1	1
A 53 Malignant neoplasm of other and unspecified parts of uterus	Male	92	2	6	1	1	3	17	5	11	1	10	21	4	7	1	3
A 54 Malignant neoplasm of prostate	Female	15	7	1	1	1	2	1	1	1	1	1	2	1	1	1	1
A 55 Malignant neoplasm of skin	Male	7	7	1	1	1	1	3	1	1	1	1	3	1	1	1	1
A 56 Malignant neoplasm of bone and connective tissue	Female	2	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No.														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A 57 Malignant neoplasm of all other and unspecified sites	Male	192	10	9	4	3	8	42	9	15	1	11	53	6	8	4	9
	Female	164	5	13	3	2	3	49	6	8	2	17	39	5	5	1	6
A Other digestive organs (155-159)	Male	74	3	2	1	1	1	17	3	5	1	2	24	3	4	1	7
	Female	47	1	5	2	1	1	15	4	2		4	7	1	2		2
B Other respiratory organs (160, 164, 165)	Male	3						1					1	1	1		
	Female	3											1	1			
C Urinary Organs (180, 181)	Male	52	4	4	1	1	3	13	5	2			5	11		1	1
	Female	19	1	1			1	5	1	1	1		5				1
D Brain and other parts of nervous system (193)	Male	21	1	1		1	1	5		2		2	6	1		1	
	Female	15	1					3	1				8	1			
E Other	Male	42	2	2	2		3	6	1	6		2	11	2	2	2	1
	Female	80	2	7	1	1	1	25		5	1	10	18	3	2	1	3
A 58 Leukaemia and aleukaemia	Male	46	1	4		1	2	12	1	5	1	5	11	1	2		3
	Female	21		3	1		1	7		2		1	5		1		
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	Male	45	2	3				15		4		2	14	1	1	1	2
	Female	18		1				5		2		1	7	2			
A Hodgkin's disease (201)	Male	9	1					4		1			2			1	
	Female	7						2		1			3	1			
B Other	Male	36	1	3				11		3		2	12	1	1		2
	Female	11		1				3		1		1	4	1			
A 60 Benign neoplasms and neoplasms of unspecified nature	Male	15			1		1	2		1	1	2	4		1		2
	Female	14		1				2	1	1		1	5		2		1
III, IV. ALLERGIC DISORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASE	Total	216	7	15	13	1	7	43	9	11	4	19	55	8	7	2	15
	Male	108	3	9	8	5	5	22	3	4	2	10	23	5	3	1	10
	Female	108	4	6	5	1	2	21	6	7	2	9	32	3	4	1	5
A 61 Nontoxic goitre	Male	1											1				
	Female	1								1							
A 62 Thyrotoxicosis with or without goitre	Male																
	Female	4			1			1		1						1	
A 63 Diabetes mellitus	Male	53	1	5	5		3	12	1	2	1	5	13			1	4
	Female	66	3	5	2	1	2	11	5	2	1	6	21	2	2		
A 64 Avitaminosis and other deficiency states	Male	4	1					1					1		1		3
	Female	1											1				
A 65 Anaemias	Male	12		2			1	1				2	3	1			2
	Female	15		1	1			5		2		1	3		2		
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	Male	38	1	2	3		1	8	2	2	1	3	5	4	2		4
	Female	21	1		1			4	1	1	1	1	8	1			2
V. MENTAL, PSYCHONEUROTIC, AND PERSONALITY DISORDERS	Total	28	1	2		1	2	13			2		4	2	1		
	Male	23		2		1	2	10			2		4	2			
	Female	5	1					3							1		
A 67 Psychoses	Male	10		1				8			1						
	Female	2						1									
A 68 Psychoneuroses and disorders of personality	Male	8		1		1	1	1					3	1			
	Female	1						1									
A 69 Mental deficiency	Male	5				1	1				1		1	1			
	Female	2	1					1									
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	Total	1016	49	58	29	18	42	236	41	79	15	64	256	39	36	7	47
	Male	551	29	32	22	12	26	122	23	43	9	33	133	24	17	4	22
	Female	465	20	26	7	6	16	114	18	36	6	31	123	15	19	3	25
A 70 Vascular lesions affecting central nervous system	Male	498	24	29	21	12	25	112	23	40	8	29	116	20	16	4	19
	Female	432	20	25	6	5	15	108	17	31	5	29	116	14	19	3	19
A 71 Nonmeningococcal meningitis	Male	5	1								1	1		1			
	Female	6											2				
A 72 Multiple sclerosis	Male	9		2				1					5	1			4
	Female	7					1	1		2		1	1	1			
A 73 Epilepsy	Male	5	1					2					1		1		
	Female	3								1							2
A 77 Otitis media and mastoiditis	Male	3											1	1			1
	Female	2	1		1												
A 78 All other diseases of the nervous system and sense organs	Male	31	3	1	1		1	7		3		3	9	1			2
	Female	15			1			5	1	2	1	1	4				
VII. DISEASES OF THE CIRCULATORY SYSTEM	Total	2701	111	148	74	39	110	569	102	163	47	217	761	87	114	19	140
	Male	1819	73	98	49	29	83	345	67	104	29	150	534	55	84	15	104
	Female	882	38	50	25	10	27	224	35	59	18	67	227	32	30	4	36
A 79 Rheumatic fever	Male	1								1							
	Female	2	1														
A 80 Chronic rheumatic heart disease	Male	51		6	1	1	2	12	4	3		3	14	2	2		1
	Female	36	3	1	1		2	7	1	3	1	1	13	1			2

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX		Total	Division No. 1	Division No. 2	Division No. 3	Division No. 4	Division No. 5	Division No. 6	Division No. 7	Division No. 8	Division No. 9	Division No. 10	Division No. 11	Division No. 12	Division No. 13	Division No. 14	Division No. 15
A 81 Arteriosclerotic and degenerative heart disease	Male	Female	1464	64	77	35	22	66	277	49	87	24	125	439	44	67	14	74
A 82 Other diseases of heart	Male	Female	604	28	36	18	5	18	158	30	36	9	51	152	23	19	2	12
A 83 Hypertension with heart disease	Male	Female	77	5	2	6	2	7	14	1	3	2	3	10	4	6	1	19
A 84 Hypertension without mention of heart	Male	Female	50	1	1	2	1	1	14	1	5	2	2	10	2	4	1	5
A 85 Diseases of arteries	Male	Female	66	1	7	3	2	1	15	5	1	1	8	14	2	2	1	6
A 86 Other diseases of circulatory system	Male	Female	83	2	7	2	1	2	21	1	4	3	7	25	1	1	5	4
VIII. DISEASES OF THE RESPIRATORY SYSTEM	Male	Female	35	2	2	2	2	2	2	1	1	1	1	9	1	2	1	1
A 87 Acute upper respiratory infections	Male	Female	33	1	1	3	2	3	10	5	6	2	9	44	3	5	1	3
A 88 Influenza	Male	Female	105	2	3	2	2	5	13	3	4	2	5	21	3	1	1	2
A 89 Lobar pneumonia	Male	Female	66	2	3	2	3	2	13	3	1	1	1	4	1	1	2	1
A 90 Bronchopneumonia	Male	Female	20	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1
A 91 Primary atypical, other and unspecified pneumonia	Male	Female	518	14	30	23	2	22	124	20	35	13	19	120	31	17	9	39
A 92 Acute bronchitis	Male	Female	329	9	21	17	2	13	86	12	16	11	13	76	19	9	7	18
A 93 Bronchitis, chronic and unqualified	Male	Female	189	5	9	6	.....	9	38	8	19	2	6	44	12	8	2	21
A 94 Hypertrophy or tonsils and adenoids	Male	Female	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
A 95 Empyema and abscess of lung	Male	Female	12	.....	.....	.....	.....	.....	5	.....	1	.....	.....	1	2	.....	.....	.....
A 96 All other respiratory diseases	Male	Female	9	.....	1	.....	.....	.....	2	1	.....	.....	1	.....	.....	.....	.....	.....
IX. DISEASES OF THE DIGESTIVE SYSTEM	Male	Female	30	1	3	1	1	1	10	2	1	.....	1	3	1	2	.....	.....
A 97 Acute gastritis	Male	Female	17	1	2	.....	.....	.....	2	3	2	.....	1	3	2	.....	.....	.....
A 98 Diseases of teeth and supporting structures	Male	Female	122	3	8	5	.....	7	28	3	9	6	4	32	8	3	2	4
A 99 Ulcer of stomach	Male	Female	81	3	1	1	.....	3	22	2	7	1	3	26	4	3	1	4
A 100 Ulcer of duodenum	Male	Female	40	1	2	4	.....	2	13	2	3	1	2	6	3	1	2	4
A 101 Gastritis and duodenitis	Male	Female	48	1	2	4	.....	2	6	1	6	1	.....	7	4	4	1	9
A 102 Appendicitis	Male	Female	10	.....	.....	2	.....	.....	1	.....	.....	.....	.....	6	1	.....	.....	.....
A 103 Intestinal obstruction and hernia	Male	Female	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
A 104 Gastro-enteritis and colitis, except diarrhoea of the newborn	Male	Female	41	2	3	2	.....	2	10	1	2	3	1	11	.....	.....	.....	.....
A 105 Cirrhosis of liver	Male	Female	12	.....	1	.....	.....	.....	3	.....	1	.....	1	2	1	1	.....	.....
A 106 Cholelithiasis and cholecystitis	Male	Female	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
A 107 Other diseases of digestive system	Male	Female	5	.....	.....	1	.....	1	1	1	.....	.....	2	.....	.....	.....	.....	.....
XI. DISEASES OF THE GENITO-URINARY SYSTEM	Male	Female	63	3	6	3	.....	3	19	2	.....	1	3	16	2	3	.....	.....
A 108 Acute nephritis	Male	Female	12	.....	.....	.....	.....	.....	2	.....	3	.....	.....	2	.....	.....	.....	.....
A 109 Chronic, other and unspecified nephritis	Male	Female	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
A 110 Infections of kidney	Male	Female	17	.....	.....	.....	2	1	4	1	1	1	2	5	.....	.....	.....	.....
A 111 Calculi of urinary system	Male	Female	10	.....	.....	.....	.....	.....	3	2	1	.....	.....	3	.....	.....	.....	.....
A 112 Hyperplasia of prostate	Male	Female	25	2	2	.....	1	1	7	1	.....	1	2	9	.....	.....	.....	.....
A 114 Other diseases of genito-urinary system	Male	Female	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	1	.....	.....
A 108 Acute nephritis	Male	Female	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
A 109 Chronic, other and unspecified nephritis	Male	Female	31	1	4	3	1	2	6	1	1	1	2	5	3	.....	.....	.....
A 110 Infections of kidney	Male	Female	27	.....	1	.....	.....	.....	10	.....	2	2	1	8	2	.....	.....	.....
A 111 Calculi of urinary system	Male	Female	16	.....	.....	.....	.....	.....	3	.....	2	.....	.....	7	1	2	.....	.....
A 112 Hyperplasia of prostate	Male	Female	7	.....	.....	.....	.....	.....	2	.....	1	.....	1	1	.....	.....	.....	.....
A 114 Other diseases of genito-urinary system	Male	Female	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
A 112 Hyperplasia of prostate	Male	Female	22	1	3	1	.....	2	2	1	1	2	1	6	1	.....	.....	.....
A 114 Other diseases of genito-urinary system	Male	Female	12	.....	.....	1	1	.....	4	.....	1	.....	.....	6	.....	.....	.....	.....

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No.														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
XI. DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	Total	17	1	1	1	1	2	1	1	1	1	5	1	1	3		
A115 Sepsis of pregnancy, childbirth and the puerperium	Female	2								1							1
A116 Toxaemias of pregnancy and the puerperium	Female	4										2		1			1
A117 Haemorrhage of pregnancy and childbirth	Female	1			1												
A118 Abortion without mention of sepsis or toxæmia	Female	2					1						1				
A119 Abortion with sepsis	Female	1										1					
A120 Other complications of pregnancy, childbirth and the puerperium	Female	7	1					2			1	2					1
XII. XIII. DISEASES OF THE SKIN AND MUSCULO-SKELETAL SYSTEM	Total	36	4	1	1		12	5	3	10							
	Male	21	3	1			6	4		7							
	Female	15	1	1			6	1	3								
A121 Infections of skin and subcutaneous tissue	Male	3						1		2							
	Female	2					1	1									
A122 Arthritis and spondylitis	Male	6	1	1			1	2		1							
	Female	8		1			2			2							
A125 Ankylosis and acquired musculoskeletal deformities	Male	1					1										
	Female																
A126 All other diseases of skin and musculoskeletal system	Male	11	2				4	1				4					
	Female	5	1				3				1						
XIV. CONGENITAL MALFORMATIONS	Total	211	2	6	11		7	43	8	16	3	8	86	9	3	1	8
	Male	126	2	9			2	25	4	10	3	5	53	4	2	1	6
	Female	85	2	4	2		5	18	4	6		3	33	5	1		2
A127 Spina bifida and meningocele	Male	10		1				2		1	1		5				
	Female	7	1	1				1	1			1	2				
A128 Congenital malformations of circulatory system	Male	36		1	6		1	11	1	3	1	2	24	2	2	1	4
	Female	57		1	1			8	1	3			19	2			1
A129 All other congenital malformations	Male	57	1	2	1		1	12	3	6	1	3	24	2			2
	Female	42	1	2	1		5	9	2	3		2	12	3	1		1
XV. CERTAIN DISEASES OF EARLY INFANCY	Total	504	13	29	14	6	18	124	20	33	6	20	146	21	6	9	39
	Male	289	7	19	7	3	12	69	9	12	3	14	89	12	4	6	23
	Female	215	6	10	7	3	6	55	11	21	3	6	57	9	2	3	16
A130 Birth injuries	Male	51		7	2			12	4	2			16	5			3
	Female	23		1	2			6	1				8		1		3
A131 Postnatal asphyxia and atelectasis	Male	66	1	2	1	1	4	11	1	2	1	3	33		1	3	2
	Female	63	3	1	1	1	2	14	1	5	1	3	22	2		2	5
A132 Infections of the newborn	Male	15	1	1				2				1	6		2	1	1
	Female	11		1	1			1		1	1		3	2			1
A133 Haemolytic disease of newborn	Male	11	1	1				2		2		1	3	1			
	Female	3						1		1			1				
A134 All other defined diseases of early infancy	Male	6		1				1		1	1		1				1
	Female	12		1			1	2	1	2			4				1
A135 Ill-defined diseases peculiar to early infancy, and immaturity unqualified	Male	140	4	7	4	2	8	41	4	6	1	8	31	5	1	2	16
	Female	103	3	6	3	2	3	31	8	11	1	3	20	4	1	1	6
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS	Total	293	5	5	6	3	3	185	3	7	3	4	44	5	4	1	15
	Male	213	4	2	4	3	2	139	2	6	2		36		3	1	9
	Female	80	1	3	2		1	46	1	1	1	4	8	5	1		6
A136 Senility without mention of psychosis	Male	39			1	2		20		3	1		6		1	1	4
	Female	26		1	1			12	1			4	2	1			4
A137 Ill-defined and unknown causes	Male	174	4	2	3	1	2	119	2	3	1		30		2		5
	Female	54	1	2	1		1	34		1	1		6	4	1		2
EXXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	Total	819	22	46	25	14	29	174	36	52	7	51	222	37	31	16	57
	Male	623	21	41	17	8	24	128	28	41	6	37	163	30	26	12	41
	Female	196	1	5	8	6	5	46	8	11	1	14	59	7	5	4	16
AE138 Motor vehicle accidents	Male	231	2	20	8	4	4	47	9	23	2	19	61	6	10	4	12
	Female	70		2	3	1	1	18	3	6		3	20	3	4	1	5
A Traffic accidents (810-825)	Male	222	2	20	7	4	3	44	9	23	2	18	59	5	10	4	12
	Female	65		2	3		1	17	3	5		3	19	2	4	1	5
B Non-traffic accidents	Male	9			1		1	3				1	2	1			
	Female	5				1		1		1			1	1			

TABLE 6—CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS
(INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Division No.														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AE139 Other transport accidents	Male	36	1	1				7	3	1		2	11	3	4	1	2
	Female	1															
AE140 Accidental poisoning	Male	21	2	1				6		2				1			1
	Female	11						4					6	1			
AE141 Accidental falls	Male	45	2	5			4	12	4	2	2	2	7		1		4
	Female	41	1	1	2	2	10		2				13				3
AE142 Accident caused by machinery	Male	28	2	2		2	3	3	2	2		1	1	3	1		2
	Female	2											1				
AE143 Accident caused by fire and explosion of combustible material	Male	23					1	2	1	1		1		7		2	3
	Female	11						2					5	1		3	1
AE144 Accident caused by hot substance, corrosive liquid, steam and radiation	Male	1						1									
	Female	3							1				1				1
AE145 Accident caused by firearm	Male	12	1					3	1	1		1			1		
	Female	2															
AE146 Accidental drowning and submersion	Male	44	4	2			2	10		1		3	7	4	3	1	3
	Female	10			1			3				1	4				
AE147 All other accidental causes	Male	68	3	5	2		3	10	3	1	1	3	18	4	2	4	9
	Female	22	1	1	1			7	2	1	1		3	1			3
AE148 Suicide and self-inflicted injury	Male	95	4	6	1	1	5	24	2	7	1	3	33	2	3		3
	Female	16		1				1	5	1	1	2	3		1		1
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Male	19	1			1	2	3	3			2	5	1			1
	Female	7			2	1	1		2				1				
NXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY)	Total	819	22	46	25	14	29	174	36	52	7	51	222	37	31	16	57
	Male	623	21	41	17	8	24	128	28	41	6	37	163	30	26	12	41
	Female	196	1	5	8	6	5	46	8	11	1	14	59	7	5	4	16
AN138 Fracture of skull	Male	117	2	11	2	2	2	30	10	7	2	8	27	2	4	2	6
	Female	32			3		1	10	3	2	1	1	7	1	2		1
AN139 Fracture of spine and trunk	Male	25				2		5	2	4	1	2	5	2	1	1	
	Female	12	1		1								3	1			
AN140 Fracture of limbs	Male	31	2	2			3	4	2	2			10	1	2	1	2
	Female	31		1		1	2	8				7					
AN142 Sprains and strains of joints and adjacent muscles	Male	10											1				
	Female	1															
AN143 Head injury (excluding fracture)	Male	77	5	8	2	1	5	14	3	5		5	15	2	4	2	6
	Female	15		2				6	1				4	1			1
AN144 Internal injury of chest, abdomen, and pelvis	Male	142	2	10	3	1	6	30	5	10	1	8	44	6	5	3	8
	Female	34				2	1	6	1	2		2	16	1	1		2
AN145 Laceration and open wounds	Male	21	1		1			5	1	2		2	5	1	1		2
	Female	4				1							2			1	
AN146 Superficial injury, contusion and crushing with intact skin surface	Male	2		1						1							
	Female																
AN147 Effects of foreign body entering through orifice	Male	7				1	2	1					2	1			
	Female	8			1	1		3					3	7			1
AN148 Burns	Male	22					1	3	1	1		1				3	2
	Female	11			1			1		1			2	1			1
AN149 Effects of poisons	Male	44	3	1	1	1	1	10		6		1	16		3		
	Female	19						1					9	1			
AN150 All other and unspecified effects of external causes	Male	134	6	8		1	5	25	3	3	2	10	35	8		1	13
	Female	30		2	2	1		6	2	1		3	7	1	1		4

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER, IN ALBERTA, 1958

CAUSE OF DEATH (Intermediate List)	SEX										
		Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
ALL CAUSES	Total	3955	30	1582	66	1607	42	78	233	206	111
	Male	2441	21	955	39	1026	26	49	138	121	66
	Female	1514	9	627	27	581	16	29	95	85	45
I. INFECTIVE AND PARASITIC DISEASES	Total	38		13		22	1	1	1		
	Male	25		11		12		1	1		
	Female	13		2		10	1				
A 1 Tuberculosis of respiratory system	Male	6		4		2					
	Female	4		1		3					
A 2 Tuberculosis of meninges and central nervous system	Male	1						1			
A 4 Tuberculosis of bones and joints	Female										
	Male	1		1							
A 5 Tuberculosis, all other forms	Female										
	Male	2				2					
A 6 Congenital syphilis	Female	1				1					
	Male	1		1							
A 9 General paralysis of insane	Female										
	Male	2		1		1					
A 10 All other syphilis	Female										
	Male	5		2		2			1		
A 16 Dysentery, all forms	Female										
	Male										
A 20 Septicaemia and pyaemia	Female	1				1					
	Male	1				1					
A 21 Diphtheria	Female	1				1					
	Male	1				1					
A 28 Acute poliomyelitis	Female										
	Male	1		1							
A 29 Acute infectious encephalitis	Female										
	Male	1		1							
A 34 Infectious hepatitis	Female	2				1		1			
	Male	2				2					
A 43 All other diseases classified as infective and parasitic	Female										
	Male	1				1					
	Female	4		1		3					
II. NEOPLASMS	Total	688	5	273	10	283	6	11	49	34	17
	Male	388	4	146	5	173	3	6	23	17	11
	Female	300	1	127	5	110	3	5	26	17	6
A 44 Malignant neoplasm of buccal cavity and pharynx	Male	5		2		1			2		
	Female	2		1						1	
A 45 Malignant neoplasm of oesophagus	Male	7		5		2					
	Female	3		2		1					
A 46 Malignant neoplasm of stomach	Male	49		19	1	28		1			
	Female	26		9	1	9			5	2	
A 47 Malignant neoplasm of intestine, except rectum	Male	34		13		14	1	1	2	3	
	Female	35		19		15			1		
A 48 Malignant neoplasm of rectum	Male	24		12	1	8			1	2	
	Female	9		3		3	2			1	
A 49 Malignant neoplasm of larynx	Male	2		2							
	Female	1		1							
A 50 Malignant neoplasm of trachea and of bronchus and lung not specified as secondary	Male	72	2	22	1	37			3	5	2
	Female	7		2		4				1	
A 51 Malignant neoplasm of breast	Male	1		1							
	Female	61	1	19		25		1	5	7	3
A 52 Malignant neoplasm of cervix uteri	Female	21		10		9		1	1		
A 53 Malignant neoplasm of other and unspecified parts of uterus	Female	12		7		2	1	1			1
A 54 Malignant neoplasm of prostate	Male	36		14		14			3	1	3
A 55 Malignant neoplasm of skin	Male	6	1		1	3			1		
	Female	5		3		2					
A 56 Malignant neoplasm of bone and connective tissue	Male	2				2					
	Female										
A 57 Malignant neoplasm of all other and unspecified sites	Male	94	1	30	1	39	1	4	8	6	4
	Female	89		39	3	29		2	9	5	2
A Other digestive organs (155-159)	Male	37		12	1	17	1		2	3	1
	Female	21		11	1	3		1	3	1	1
B Other respiratory organs (160, 164, 165)	Male	2		1				1			
	Female	3		1	1	1					
C Urinary organs (180, 181)	Male	23	1	8		8		1	3	1	1
	Female	12		5		5			1	1	
D Brain and other parts of nervous system (193)	Male	13		4		3		2	1	1	2
	Female	9		2		6				1	
E Other	Male	19		5		11			2	1	
	Female	44		20	1	14		1	5	2	1

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
A 58 Leukaemia and aleukaemia	Male	25	...	11	...	10	...	...	2	...	2
	Female	13	...	6	1	3	...	...	3	...	...
A 59 Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	Male	26	...	13	...	12	...	...	1	...	...
	Female	11	...	5	...	5	...	...	1	...	...
A Hodgkin's disease (201)	Male	6	...	4	...	2	...	...	...	...	...
	Female	5	...	2	...	3	...	...	...	...	...
B Other	Male	20	...	9	...	10	...	...	1	...	...
	Female	6	...	3	...	2	...	...	...	...	...
A 60 Benign neoplasms and neoplasms of unspecified nature	Male	5	...	2	...	3	...	...	1	...	...
	Female	5	...	1	...	3	...	...	...	...	...
III, IV. ALLERGIC DISORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASES	Total	94	...	33	2	41	4	1	6	6	1
	Male	45	...	18	1	18	2	...	3	2	1
	Female	49	...	15	1	23	2	1	3	4	...
A 61 Nontoxic goitre	Male	1	...	...	...	1	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 62 Thyrotoxicosis with or without goitre	Male	...	...	...	...	...	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 63 Diabetes mellitus	Male	27	...	11	1	11	1	...	1	1	1
	Female	29	...	7	1	14	1	1	2	3	...
A 64 Avitaminosis and other deficiency states	Male	1	...	1	...	...	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A 65 Anaemias	Male	3	...	1	...	2	...	...	...	...	...
	Female	7	...	4	...	2	...	...	...	...	...
A 66 Allergic disorders; all other endocrine, metabolic and blood diseases	Male	13	...	5	...	4	...	...	2	1	...
	Female	12	...	3	...	7	1	...	...	1	...
V. MENTAL, PSYCHONEUROTIC, AND PERSONALITY DISORDERS	Total	15	...	10	...	4	...	...	1	...	...
	Male	12	...	7	...	4	...	...	1	...	...
	Female	3	...	3	...	...	...	...	...	...	...
A 67 Psychoses	Male	6	...	6	...	...	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 68 Psychoneuroses and disorders of personality	Male	5	...	1	...	3	...	...	1	...	...
	Female	1	...	1	...	...	...	...	...	...	...
A 69 Mental deficiency	Male	1	...	...	...	1	...	...	...	...	...
	Female	1	...	1	...	...	...	...	...	...	...
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	Total	486	2	190	10	181	...	4	35	38	26
	Male	242	1	99	3	82	...	1	20	21	15
	Female	244	1	91	7	99	...	3	15	17	11
A 70 Vascular lesions affecting central nervous system	Male	213	1	89	3	69	...	1	19	18	13
	Female	227	1	86	6	93	...	3	14	17	7
A 71 Nonmeningococcal meningitis	Male	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	1	...	...	...	...	...
A 72 Multiple sclerosis	Male	6	...	1	...	4	...	...	1	...	...
	Female	3	...	1	...	1	...	...	...	...	1
A 73 Epilepsy	Male	3	...	2	...	1	...	...	...	...	...
	Female	1	...	...	...	...	...	...	...	...	1
A 77 Otitis media and mastoiditis	Male	1	...	...	...	1	...	...	...	...	...
	Female	1	...	...	...	...	...	...	1	...	...
A 78 All other diseases of the nervous system and sense organs	Male	19	...	7	...	7	...	...	...	3	2
	Female	11	...	4	1	4	...	...	...	...	2
VII. DISEASES OF THE CIRCULATORY SYSTEM	Total	1280	6	445	30	565	19	20	79	80	36
	Male	833	5	263	20	397	13	15	49	47	24
	Female	447	1	182	10	168	6	5	30	33	12
A 79 Rheumatic fever	Male	...	...	...	...	...	...	...	...	...	...
	Female	2	...	...	...	1	...	...	...	1	...
A 80 Chronic rheumatic heart disease	Male	25	...	11	1	10	...	...	3	...	...
	Female	18	...	6	...	9	...	...	...	1	1
A 81 Arteriosclerotic and degenerative heart disease	Male	679	3	211	13	329	10	14	36	40	23
	Female	306	...	125	7	113	3	3	23	26	6
A 82 Other diseases of heart	Male	19	1	7	...	6	1	...	1	3	...
	Female	22	...	10	...	8	2	...	...	...	2
A 83 Hypertension with heart disease	Male	30	...	14	1	9	...	...	5	1	...
	Female	50	1	19	2	21	...	1	4	1	1
A 84 Hypertension without mention of heart	Male	18	...	7	1	7	...	...	2	...	1
	Female	15	...	8	...	4	...	...	1	...	1
A 85 Diseases of arteries	Male	54	1	9	3	34	1	1	2	2	...
	Female	29	...	13	1	11	1	1	...	...	...
A 86 Other diseases of circulatory system	Male	8	...	4	1	2	...	...	1	...	...
	Female	5	...	1	...	1	...	...	1	1	1

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX										
		Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
VIII. DISEASES OF THE RESPIRATORY SYSTEM	Total	215	3	94	3	81	2	5	12	10	5
	Male	144	2	67	2	53	2	5	7	6	5
	Female	71	1	27	1	28	...	...	5	4	...
A 88 Influenza	Male	4	...	3	...	1	...	...	...	...	...
	Female	3	...	2	...	...	...	...	1	...	...
A 89 Lobar pneumonia	Male	11	...	8	...	2	1	...	...	...	...
	Female	7	...	2	1	1	...	...	1	1	1
A 90 Bronchopneumonia	Male	52	1	23	1	18	...	1	4	2	2
	Female	39	1	14	...	19	...	1	2	2	2
A 91 Primary atypical, other and unspecified pneumonia	Male	15	...	10	...	5	...	...	...	...	...
	Female	11	...	5	...	3	...	1	1	1	...
A 92 Acute bronchitis	Male	5	...	...	...	5	...	...	...	...	...
	Female	4	...	...	...	3	1	...	...	...	...
A 93 Bronchitis, chronic and unqualified	Male	20	...	7	1	8	...	1	2	1	...
	Female	3	...	2	...	1	...	...	...	...	...
A 97 All other respiratory diseases	Male	37	1	16	...	14	1	1	1	3	...
	Female	4	...	2	...	1	...	1	...	...	...
IX. DISEASES OF THE DIGESTIVE SYSTEM	Total	154	...	60	4	64	3	1	8	10	4
	Male	97	...	38	2	42	2	1	5	7	...
	Female	57	...	22	2	22	1	...	3	3	4
A 98 Diseases of teeth and supporting structures	Male	...	...	...	...	...	...	...	...	...	...
	Female	1	...	...	...	1	...	...	...	...	...
A 99 Ulcer of stomach	Male	9	...	4	1	4	...	...	...	...	...
	Female	4	...	3	...	1	...	...	...	...	...
A100 Ulcer of duodenum	Male	19	...	7	...	8	...	...	2	2	...
	Female	2	...	...	...	2	...	...	...	...	...
A102 Appendicitis	Male	3	...	1	...	...	1	...	...	1	...
	Female	...	...	...	...	...	...	...	...	...	...
A103 Intestinal obstruction and hernia	Male	12	...	3	...	8	...	...	1	...	...
	Female	10	...	3	...	5	...	...	...	1	1
A104 Gastro-enteritis and colitis, except diarrhoea of the newborn	Male	11	...	4	1	4	...	...	1	1	...
	Female	8	...	3	2	2	...	...	...	...	...
A105 Cirrhosis of liver	Male	24	...	15	...	6	...	1	1	2	...
	Female	10	...	3	...	4	...	...	1	1	1
A106 Cholelithiasis and cholecystitis	Male	3	...	1	...	1	...	...	1	...	...
	Female	10	...	3	...	3	1	...	2	...	...
A107 Other diseases of digestive system	Male	16	...	3	...	11	1	...	1	...	1
	Female	12	...	7	...	4	...	...	...	...	2
X. DISEASES OF THE GENITO-URINARY SYSTEM	Total	66	...	21	1	28	3	1	8	2	2
	Male	43	...	13	1	19	...	1	6	2	1
	Female	23	...	8	...	9	3	...	2	...	1
A109 Chronic, other and unspecified nephritis	Male	12	...	5	...	3	...	...	3	1	...
	Female	17	...	6	...	7	3	...	1	...	...
A110 Infections of kidney	Male	7	...	1	...	5	...	...	...	...	1
	Female	5	...	2	...	2	...	...	...	...	1
A111 Calculi of urinary system	Male	3	...	2	...	1	...	...	...	...	...
	Female	1	...	...	...	...	...	...	1	...	...
A112 Hyperplasia of prostate	Male	12	...	1	1	5	...	1	3	1	...
	Female	9	...	4	...	5	...	...	...	...	...
A114 Other diseases of genito-urinary system	Male	...	...	...	...	...	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
XI. DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND PUERPERIUM	Total	5	...	1	1	2	...	...	1	...	...
A116 Toxaemias of pregnancy and the puerperium	Female	1	...	...	...	1	...	...	...	...	...
A118 Abortion without mention of sepsis or toxæmia	Female	1	...	1	...	...	...	...	...	...	...
A120 Other complications of pregnancy, childbirth and the puerperium	Female	3	...	...	1	1	...	...	1	...	...
XII, XIII. DISEASES OF THE SKIN AND MUSCULOSKELETAL SYSTEM	Total	20	1	8	...	7	...	1	2	...	1
	Male	12	1	3	...	4	...	1	2	...	1
	Female	8	...	5	...	3	...	...	...	...	...
A121 Infections of skin and subcutaneous tissue	Male	1	...	...	...	...	...	1	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A122 Arthritis and spondylitis	Male	1	...	...	...	...	...	...	...	...	1
	Female	5	...	2	...	3	...	...	...	...	...

TABLE 7—CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION
AND OVER IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX										
		Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
A125 Ankylosis and acquired musculoskeletal deformities	Male	1	...	1	...	...	...	...	...	...	...
	Female	...	...	...	...	...	...	...	...	...	...
A126 All other diseases of skin and musculoskeletal system	Male	9	1	2	...	4	...	...	2	...	...
	Female	3	...	3	...	...	...	...	...	...	...
XIV. CONGENITAL MALFORMATIONS	Total	122	2	36	...	68	1	7	3	1	4
	Males	70	1	20	...	40	1	4	1	...	3
	Female	52	1	16	...	28	...	3	2	1	1
A127 Spina bifida and meningocele	Male	6	...	1	...	4	...	...	...	...	1
	Female	5	...	1	...	2	...	...	1	1	...
A128 Congenital malformations of circulatory system	Male	32	...	10	...	18	1	2	...	...	1
	Female	29	1	7	...	16	...	3	1	...	1
A129 All other congenital malformations	Male	32	1	9	...	18	...	2	1	...	1
	Female	18	...	8	...	10	...	...	...	...	...
XV. CERTAIN DISEASES OF EARLY INFANCY	Total	248	3	107	1	98	...	15	12	7	5
	Male	142	1	58	1	59	...	10	9	3	1
	Female	106	2	49	...	39	...	5	3	4	4
A130 Birth injuries	Male	27	...	11	...	11	...	1	4	...	...
	Female	13	...	6	...	6	...	1	...	...	...
A131 Postnatal asphyxia and atelectasis	Male	34	...	8	...	20	...	5	...	1	...
	Female	32	...	13	...	14	...	2	...	2	1
A132 Infections of the newborn	Male	6	...	1	...	4	...	1	...	...	...
	Female	4	1	...	...	3	...	...	...	...	...
A133 Haemolytic disease of newborn	Male	5	...	2	...	1	...	1	1	...	...
	Female	2	...	1	...	...	...	...	...	...	1
A134 All other defined diseases of early infancy	Male	1	...	1	...	...	...	...	...	...	...
	Female	4	...	2	...	2	...	...	...	...	...
A135 Ill-defined diseases peculiar to early infancy, and immaturity unqualified	Male	69	1	35	1	23	...	2	4	2	1
	Female	51	1	27	...	14	...	2	3	2	2
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS	Total	201	3	163	...	31	...	1	2	1	...
	Male	148	1	122	...	25	...	...	...	...	...
	Female	53	2	41	...	6	...	1	2	1	...
A136 Senility without mention of psychosis	Male	21	...	17	...	4	...	...	...	...	...
	Female	13	...	11	...	1	...	...	1	...	...
A137 A137 Ill-defined and unknown causes	Male	127	1	105	...	21	...	...	...	...	...
	Female	40	2	30	...	5	...	1	1	1	...
EXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	Total	323	5	128	4	132	3	10	14	17	10
	Male	240	5	90	4	98	3	6	11	16	7
	Female	83	...	38	...	34	...	4	3	1	3
AE138 Motor vehicle accidents	Male	82	1	32	3	37	2	1	2	1	3
	Female	29	...	14	...	12	...	1	1	...	...
A Traffic accidents (810-825)	Male	78	1	30	3	35	2	1	2	1	3
	Female	28	...	14	...	12	...	1	1	...	...
B Non-traffic accidents	Male	4	...	2	...	2	...	...	...	...	1
	Female	1	...	...	...	...	...	...	...	...	...
AE139 Other transport accidents	Male	17	...	7	1	7	...	1	1	...	...
	Female	...	...	...	...	...	...	...	...	...	...
AE140 Accidental poisoning	Male	14	1	5	...	5	...	1	...	2	...
	Female	...	...	3	...	3	...	...	...	...	...
AE141 Accidental falls	Male	6	...	3	...	7	...	...	3	2	...
	Female	20	...	8	...	10	...	...	...	...	...
AE142 Accident caused by machinery	Male	2	...	1	...	...	...	...	1	1	...
	Female	...	...	...	...	...	...	...	...	...	...
AE143 Accident caused by fire and explosion of combustible material	Male	4	...	1	...	3	...	...	...	...	...
	Female	3	...	1	...	2	...	...	...	...	...
AE144 Accident caused by hot substance, corrosive liquid, steam, and radiation	Male	1	...	1	...	...	...	...	...	...	1
	Female	1	...	...	...	...	...	...	...	...	1
AE145 Accident caused by firearm	Male	6	...	1	...	2	...	1	...	1	1
	Female	2	...	...	...	2	...	...	...	...	...
AE146 Accidental drowning and submersion	Male	15	...	8	...	3	...	...	1	2	1
	Female	4	...	1	...	1	...	2	...	...	...
AE147 All other accidental causes	Male	25	1	8	...	11	...	1	2	2	1
	Female	9	...	5	...	...	...	...	...	...	...
AE148 Suicide and self-inflicted injury	Male	48	1	16	...	22	1	1	2	4	1
	Female	8	...	5	...	2	...	...	1	...	...
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Male	6	1	2	...	1	...	1	...	1	...
	Female	1	...	...	...	1	...	...	...	...	...

BUREAU OF VITAL STATISTICS

TABLE 7- CAUSE OF DEATH BY SEX FOR URBAN PLACES OF 5,000 POPULATION
AND OVER IN ALBERTA, 1958—Continued

CAUSE OF DEATH (Intermediate List)	SEX	Total	Bowness	Calgary	Camrose	Edmonton	Grande Prairie	Jasper Place	Lethbridge	Medicine Hat	Red Deer
NXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY)	Total	323	5	128	4	132	3	10	14	17	10
	Male	240	5	90	4	98	3	6	11	16	7
	Female	83		38		34		4	3	1	3
AN138 Fracture of skull	Male	46	2	22	1	15		1	3	1	1
	Female	16		9		6					1
AN139 Fracture of spine and trunk	Male	10		4	1	4					1
	Female	5				3					1
AN140 Fracture of limbs	Male	13		2		8			1	2	
	Female	14		7		6			1		
AN142 Sprains and strains of joints and adjacent muscles	Male	1				1					
	Female										
AN143 Head injury (excluding fracture)	Male	26		12		8	1		1	4	
	Female	8		5		3					
AN144 Internal injury of chest, abdomen, and pelvis	Male	53		18	1	25	1	3	2	2	1
	Female	12		4		7		1			
AN145 Laceration and open wounds	Male	7		4		2				1	
	Female	1									
AN147 Effects of foreign body entering through orifice	Male	2	1	1		1					
	Female	4		2							
AN148 Burns	Male	5		2		3		1			
	Female	2		1							1
AN149 Effects of poisons	Male	24	2	6		10		1	1	3	1
	Female	11		5		6					
AN150 All other and unspecified effects of external causes	Male	53		19	1	22	1	1	3	3	3
	Female	10		5		2		2	1		

TABLE 1.—DEATHS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1958

[illegible]

A 56 Malignant neoplasm of bone and cartilage	Male	71
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TABLE 8 -- DEATHS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1958 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX	AGE															Total								
		Under 1 year	1 year	2 years	3 years	4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years		55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85 +	Not stated
EXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	Total	819	32	19	18	16	10	32	21	76	66	64	53	49	51	59	42	41	29	29	29	29	26	28	...
	Male	623	21	10	10	8	5	15	14	58	54	61	45	39	45	45	35	35	25	20	20	22	14	12	...
Female	196	11	9	8	8	5	17	7	18	12	3	8	10	6	7	7	6	4	9	9	7	6	12	16	...
AE138 Motor vehicle accidents	Male	231	...	4	3	2	1	4	3	33	27	23	18	16	16	21	14	11	8	9	5	6	5	2	...
Female	70	1	3	2	1	2	4	4	3	13	7	3	4	3	5	4	2	3	1	4	1	2	2	...	
A Traffic accidents	Male	222	...	4	4	2	1	4	3	33	26	23	17	15	16	20	14	10	6	9	4	6	5	2	...
B Non-traffic accidents	Female	65	1	3	2	1	3	3	3	13	7	3	4	3	5	4	2	3	1	4	1	2	2	...	
Male	9	...	2	1	1	1	1	1	...	...	...	...	1	1	...	1	1	...	...	...	...	...	...	...
Female	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE139 Other transport accidents	Male	36	4	2	6	3	7	1	6	3	...	2	2	2	1	1	1
Female	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE140 Accidental poisoning	Male	21	1	2	1	1	1	1	1	1	2	2	2	4	4	1	2	1	1	1	1	1	...	...
Female	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE141 Accidental falls	Male	45	1	1	1	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Female	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE142 Accident caused by machinery	Male	28	1	1	1	1	1	1	1	2	2	2	4	1	1	2	...	3	3	1	3	1	8	...	
Female	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE143 Accident caused by fire and explosion of combustible material	Male	23	3	1	3	2	1	1	1	1	1	3	1	1	3	1	1	1	1	1	2	4	9	...	
Female	11	1	1	1	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE144 Accidents caused by hot substance, corrosive liquid, steam, and radiation	Male	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Female	3	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE145 Accident caused by firearm	Male	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Female	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE146 Accidental drowning and submersion	Male	44	2	2	1	2	6	1	8	8	4	1	1	1	1	1	2	1	1	1	1	1	...	...
Female	10	...	1	...	1	1	5	1	1	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...
AE147 All other accidental causes	Male	68	1	2	1	1	3	1	4	6	6	6	6	2	4	8	1	1	2	1	2	2	1	...	
Female	22	7	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE148 Suicide and self-inflicted injury	Male	95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Female	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Male	19	1	1	1	1	2	2	2	2	11	3	8	6	9	8	10	12	6	4	5	6	1	...	
Female	7	1	...	...	...	...	...	...	...	...	...	3	1	1	3	2	3	3	1	1	1	1	...	...

NXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY)		Total	819	32	19	18	16	10	32	21	76	66	64	53	49	51	59	42	41	29	29	29	29	26	28
		Male	623	21	10	10	8	5	15	14	58	54	61	45	39	45	52	35	35	29	20	22	23	14	12
		Female	196	11	9	8	8	5	17	7	18	12	3	8	10	6	7	7	6	4	9	7	6	12	16
AN138 Fracture of skull		Male	117	1	2	1	2	1	3	2	12	13	7	7	10	9	15	10	7	3	6	3	3	1	1
		Female	32	1	1	1	1	1	4	3	5	2	1	1	1	1	2	1	1	1	2	2	1	1	1
AN139 Fracture of spine and trunk		Male	25	1	1	1	1	1	1	1	2	3	1	3	4	1	1	2	1	1	1	1	1	1	1
		Female	12	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
AN140 Fracture of limbs		Male	31	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	2	2	1	1	8
		Female	31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	16
AN142 Sprains and strains of joints and adjacent muscles		Male	1	1	1	1	1	1	1	1	8	5	12	5	4	4	10	4	9	4	1	4	4	1	1
AN143 Head injury (excluding fracture)		Male	77	1	1	1	1	1	1	1	12	13	16	14	10	14	10	5	8	7	5	1	1	3	4
AN144 Internal injury of chest, abdomen, and pelvis		Male	142	1	1	3	1	1	3	3	13	4	1	2	2	2	1	1	1	2	2	3	1	1	1
AN145 Laceration and open wounds		Male	24	1	1	1	1	1	1	1	1	3	2	3	2	1	1	1	1	2	2	1	1	1	1
AN146 Superficial injury, contusion and crushing with intact skin surface		Female	4	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1
AN147 Effects of foreign body entering through orifice		Male	7	4	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
AN148 Burns		Female	8	3	1	1	1	2	2	1	1	1	3	6	7	6	3	6	3	1	1	1	1	1	1
		Male	22	3	3	3	3	1	2	2	1	3	6	5	7	6	3	3	3	1	1	1	1	1	1
AN149 Effects of poisons		Female	11	1	1	1	1	1	1	1	1	3	2	1	3	1	3	1	2	1	1	1	1	1	1
		Male	44	1	1	1	1	1	1	1	1	2	10	7	3	8	11	6	5	5	3	6	3	1	2
AN150 All other and unspecified effects of external causes		Female	134	13	2	2	2	3	6	7	17	12	10	7	3	8	11	6	3	1	1	1	1	1	1
		Male	30	5	1	1	1	1	6	1	1	2	2	1	3	3	3	3	1	1	1	1	1	1	1

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[illegible]

[illegible]

TABLE 9 — DEATHS, BY CAUSE AND SEX, BY AGE, EDMONTON, 1958 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX	AGE															Total								
		Under 1 year	1 year	2 years	3 years	4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years		55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85 +	Not stated
AE143 Accident caused by fire and explosion of combustible material	Male	3								1	2		1												
AE145 Accident caused by firearm	Female	2																							
AE146 Accident drowning and submersion	Male	2									2														
AE147 All other accidental causes	Female	3					1																		
AE148 Suicide and self-inflicted injury	Male	11	3	1						3	1	1	2	1	3	4	3					1			
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Female	22								2	2	1	1	1	1	1									
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Male	2																							
AE149 Homicide and injury purposely inflicted by other persons (not in war)	Female	1										1													
XXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY)	Total	132	3	4	1	1	3	2	10	18	11	7	9	9	12	9	5	4	2	2	2	9	4	7	2
AN138 Fracture of skull	Male	15									1	4	1	2	1	3									
AN139 Fracture of spine and trunk	Female	6			1							2		1											
AN140 Fracture of limbs	Male	4								1															
AN142 Sprains and strains of joints and adjacent muscles	Female	8																							
AN143 Head injury (excluding fracture)	Male	1																							
AN144 Internal injury of chest, abdomen, and pelvis	Female	2							2	1															
AN145 Laceration and open wounds	Male	25		1					2	4	5	1	1	1	4	1	2	1	1			1	1		
AN147 Effects of foreign body entering through orifice	Female	7																							
AN148 Burns	Male	2																							
AN149 Effects of poisons	Female	1																							
AN150 All other and unspecified effects of external causes	Male	10																							
AN150 All other and unspecified effects of external causes	Female	3																							
AN150 All other and unspecified effects of external causes	Female	22	3																						

TABLE 10—DEATHS, BY CAUSE AND SEX, BY AGE, CALGARY, 1958

CAUSE OF DEATH (Intermediate List)	SEX	AGE														Total	Not stated								
		Under 1 year	1 year	2 years	3 years	4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years			50-54 years	55-59 years	60-64 years	65-69 years	70-74 years	75-79 years	80-84 years	85 +
ALL CAUSES	Total	1582	171	5	3	4	5	8	4	9	22	20	24	33	44	60	59	77	119	175	245	185	178	132	
	Male	955	98	1	1	2	3	3	2	5	15	11	16	21	33	47	40	54	74	114	147	116	93	59	
	Female	627	73	4	3	1	5	2	2	4	7	9	8	12	11	13	19	23	45	61	98	69	85	73	
I. INFECTIVE AND PARASITIC DISEASES	Total	13						2		1	1		1			1		1	2	1	3				
	Male	11						1		1	1		1					1	2	1	3				
	Female	2						1								1									
A 1 Tuberculosis of respiratory system	Male	4											1			1			2	1					
	Female																								
A 4 Tuberculosis of bones and joints	Male	1																							
	Female																								
A 6 Congenital syphilis	Male	1								1															
	Female																								
A 9 General paralysis of insane	Male	1																							
	Female																								
A 10 All other syphilis	Male	2																1							
	Female																								
A 28 Acute poliomyelitis	Male	1									1														
	Female																								
A 29 Acute infectious encephalitis	Male	1																							
	Female																								
A 43 All other diseases classified as infective and parasitic	Male																								
	Female	1						1																	
II. NEOPLASMS	Total	273	1					3		1	2	5	6	11	11	8	14	21	31	33	54	26	32	11	
	Male	146	1					2		1	1	2	4	5	4	4	7	10	12	20	32	19	15	5	
	Female	127						1			1	3	2	6	7	4	7	11	19	13	22	7	17	6	
A 44 Malignant neoplasm of buccal cavity and pharynx	Male	2																		1	1				
	Female	1																1							
A 45 Malignant neoplasm of oesophagus	Male	5																		2	1	1	1		
	Female	2																							
A 46 Malignant neoplasm of stomach	Male	19										1							4	2	3	3	2	1	
	Female	9																							

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	Male	Female	Total
A 99 Ulcer of stomach	4	3	7
A100 Ulcer of duodenum	3	7	10
A102 Appendicitis	1	1	2
A103 Intestinal obstruction and hernia	3	1	4
A104 Gastro-enteritis and colitis, except diarrhoea of the newborn	3	1	4
A105 Cirrhosis of liver	15	3	18
A106 Cholelithiasis and cholecystitis	1	3	4
A107 Other diseases of digestive system	3	1	4
X. DISEASES OF THE GENITO- URINARY SYSTEM	21	13	34
A109 Chronic, other and unspecified nephritis	5	6	11
A110 Infections of kidney	1	1	2
A111 Calculi of urinary system	2	2	4
A112 Hyperplasia of prostate	1	1	2
A114 Other diseases of genito- urinary system	4	4	8
XI. DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	1	1	2
A118 Abortion without mention of sepsis or toxæmia	1	1	2
XII. XIII. DISEASES OF THE SKIN AND MUSCULO- SKELETAL SYSTEM	8	3	11
A122 Arthritis and spondylitis	2	2	4
A125 Ankylosis and acquired musculo- skeletal deformities	1	1	2
A126 All other diseases of skin and musculoskeletal system	3	3	6

[illegible]

[illegible]

A 29	Acute infectious encephalitis	Male
A 30	Late effects of acute poliomyelitis and acute infectious encephalitis	Male
A 32	Measles	Male
A 34	Infectious hepatitis	Male
A 43	All other diseases classified as infective and parasitic	Female
II. NEOPLASMS		
A 44	Malignant neoplasm of buccal cavity and pharynx	Male
A 45	Malignant neoplasm of oesophagus	Female
A 46	Malignant neoplasm of stomach	Female
A 47	Malignant neoplasm of intestine, of colon	Female
A 48	Malignant neoplasm of rectum	Female
A 49	Malignant neoplasm of larynx	Female
A 50	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	Male
A 51	Malignant neoplasm of breast	Female
A 52	Malignant neoplasm of cervix uteri	Female
A 53	Malignant neoplasm of other and unspecified parts of uterus	Female
A 54	Malignant neoplasm of prostate	Male
A 55	Malignant neoplasm of skin	Female
A 56	Malignant neoplasm of bone and connective tissue	Male
A 57	Malignant neoplasm of all other and unspecified sites	Female
A	Other digestive organs (152-159)	Male
B	Other respiratory organs (160, 164, 165)	Male
C	Urinary organs (180, 181)	Male
D	Brain and other parts of nervous system (193)	Female

[illegible]

TABLE 11 — DEATHS, BY CAUSE AND SEX, BY MARITAL STATUS AND AGE, AND MONTH OF DEATH, ALBERTA, 1958 (Continued)

CAUSE OF DEATH (Intermediate List)	SEX	Total	Under 15 years	MARITAL STATUS								MONTHS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
				Single				Married				Widowed				Residual	January	February	March	April	May	June	July	August	September	October	November	December																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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A 88 Influenza	Male	12	3	1	1

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TABLE 12: INFANT DEATHS AND HOSPITAL INFANT DEATHS BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1958

COUNTIES	Total Infant Deaths				Infant Deaths in Hospitals			
	Total by Occurrence	Total by Residence	By Occurrence Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence Residence Elsewhere	By Residence; Occurrence Elsewhere
ALBERTA	933	932	14	13	787	787	11	11
Division No. 1	22	19	5	2	17	14	5	2
Division No. 2	40	38	5	3	33	32	4	3
Division No. 3	30	36	1	7	20	25	1	6
Division No. 4	11	10	2	1	7	6	2	1
Division No. 5	30	37	2	9	23	30	2	9
Division No. 6	211	209	13	11	180	178	12	10
Division No. 7	32	38	3	9	30	36	3	9
Division No. 8	51	57	3	9	45	51	3	9
Division No. 9	16	16	4	4	8	9	3	4
Division No. 10	25	32	5	12	23	31	4	12
Division No. 11	323	281	49	7	297	255	46	4
Division No. 12	52	57	5	10	40	44	5	9
Division No. 13	16	17	3	4	14	15	2	3
Division No. 14	8	14	....	6	6	12	....	6
Division No. 15	66	71	2	7	44	49	1	6

TABLE 13: INFANT DEATHS BY OCCURRENCE AND RESIDENCE FOR URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1958

CITY, TOWN OR VILLAGE	Total Infant Deaths				Infant Deaths in Hospitals			
	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere
Athabasca	6	5	1	.....	6	5	1	.....
Barrhead	2	.....	2	.....	2	.....	.....	.....
Beverly	.....	4	.....	4	.....	3	.....	3
Blairmore	.....	2	.....	2	.....	2	.....	2
Bonnyville	5	3	2	.....	5	3	2	.....
Bow Island	.....	1	.....	1	.....	1	.....	1
Bowness	3	9	.....	6	.....	5	.....	5
Brooks	6	7	.....	1	4	5	.....	1
Calgary	188	171	26	9	170	154	25	9
Camrose	4	1	.....	4	.....	1	3	.....
Cardston	3	2	1	.....	3	2	1	.....
Claresholm	3	1	2	.....	3	1	2	.....
Coaldale	4	3	2	.....	4	3	2	.....
Cold Lake	6	4	2	.....	6	4	2	1
Coleman	.....	2	.....	2	.....	2	.....	2
Devon	.....	2	.....	2	.....	.....	.....	2
Didsbury	4	1	4	.....	4	1	4	.....
Drayton Valley	3	7	.....	4	1	5	.....	4
Drumheller	7	3	4	.....	6	2	4	.....
Edmonton	306	198	111	3	286	179	109	2
Edson	6	4	4	.....	6	4	4	2
Fairview	3	4	.....	1	2	3	.....	1
Forest Lawn	.....	1	.....	1	.....	1	.....	1
Fort McLeod	4	7	.....	3	2	4	.....	2
Fort Saskatchewan	.....	3	.....	3	.....	3	.....	3
Grande Prairie	7	.....	7	.....	7	.....	7	.....
Hanna	6	3	3	.....	4	1	3	.....
High Prairie	11	3	8	.....	11	3	8	.....
High River	2	.....	2	.....	2	.....	2	.....
Innisfail	4	2	2	.....	4	2	2	.....
Jasper Place	1	24	.....	23	.....	23	.....	23
Lacombe	9	4	5	.....	9	4	5	.....
Leduc	.....	2	.....	2	.....	2	.....	2
Lethbridge	20	15	6	1	18	13	6	1
Lloydminster	.....	3	.....	3	.....	3	.....	3
Magrath	1	1	.....	.....	.....	.....	.....	.....
McLennan	5	1	5	1	5	1	5	1
McMurray	4	3	2	1	4	2	2	.....
Medicine Hat	20	8	12	.....	17	5	12	.....
Nanton	.....	.....	.....	.....	.....	.....	.....	.....
Olds	4	3	2	1	4	3	2	1
Peace River	5	3	2	.....	4	3	1	.....
Pincher Creek	8	7	3	2	8	7	3	2
Ponoka	7	9	.....	2	7	9	.....	2
Raymond	2	1	1	.....	2	1	1	.....
Redcliff	1	5	.....	4	.....	4	.....	4
Red Deer	7	8	1	2	7	8	1	2
Redwater	.....	.....	.....	.....	.....	.....	.....	.....
Rocky Mountain House	7	6	1	.....	7	6	1	.....
St. Albert	.....	1	.....	1	.....	1	.....	1
St. Paul	7	1	6	.....	6	.....	6	.....
Stettler	9	6	3	.....	9	6	3	.....
Stony Plain	.....	.....	.....	.....	.....	.....	.....	.....
Sylvan Lake	.....	.....	.....	.....	.....	.....	.....	.....
Taber	5	3	2	.....	5	3	2	.....
Three Hills	3	1	2	.....	3	1	2	.....
Vegreville	3	3	1	1	3	3	1	1
Vermillion	.....	.....	.....	.....	.....	.....	.....	.....
Vulcan	2	1	1	.....	2	1	1	.....
Wainwright	6	6	1	1	6	6	1	1
Westlock	2	.....	2	.....	2	.....	2	.....
Wetaskiwin	9	4	7	2	9	4	7	2

TABLE 14—SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE AT DEATH, ALBERTA, 1958 (Continued)

[illegible]

TABLE 14 — SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE AT DEATH, ALBERTA, 1958 (Continued)

[illegible]

*Includes Hodgkin's disease, leukaemia and aleukaemia.

TABLE 15 — SELECTED CAUSES OF INFANT DEATH BY SEX AND MONTH OF DEATH, ALBERTA, 1958 (Continued)

Int. List No.	CAUSE OF DEATH (6th Rev.)	Total Under 1 Year		MONTH OF DEATH											
				January			February			March			April		
		Male	Female	M.	F.	M.	M.	F.	M.	F.	M.	F.	M.	F.	M.
769	Maternal toxæmia— —Without immaturity	11	8	1	2	1	1	1	1	1	1	1	1	1	1
	—With immaturity	3	2	1	1	1	1	1	1	1	1	1	1	1	1
770	Erythroblastosis— —Without immaturity	7	6	1	2	1	1	1	1	1	1	1	1	1	1
	—With immaturity	14	11	3	3	1	3	1	1	1	1	1	1	1	1
771	Haemorrhagic disease of newborn— —Without immaturity	10	8	1	2	1	2	1	1	1	1	1	1	1	1
	—With immaturity	4	4	1	1	1	1	1	1	1	1	1	1	1	1
772	Nutritional maladjustment— —Without immaturity	5	3	2	1	1	1	1	1	1	1	1	1	1	1
	—With immaturity	2	2	1	1	1	1	1	1	1	1	1	1	1	1
773	Ill-defined disorders peculiar to early infancy— —Without immaturity	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	—With immaturity	45	20	1	1	2	2	5	3	2	1	1	1	1	1
774-776	Immaturity	17	6	1	1	1	1	1	1	1	1	1	1	1	1
795	Ill-defined and unknown causes	128	14	1	1	2	1	1	1	1	1	1	1	1	1
E810-E825	Motor vehicle traffic accidents	198	115	8	12	6	8	5	6	7	4	1	1	1	1
E900-E904	Accidental falls	14	8	1	2	1	1	1	1	1	1	1	1	1	1
E916	Accidents caused by fire	1	1	1	1	1	1	1	1	1	1	1	1	1	1
E921, E922	Inhalation and ingestion of food or other object	4	3	1	1	1	1	1	1	1	1	1	1	1	1
E924, E925	Accidental mechanical suffocation	8	3	1	1	1	1	1	1	1	1	1	1	1	1
Residual		13	10	3	1	1	1	1	1	1	1	1	1	1	1
E800-E862	All other accidents	3	2	1	1	1	1	1	1	1	1	1	1	1	1
RESIDUALS															
Class I	(Ineffective and parasitic diseases)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class II	(Neoplasms)	2	2	1	1	1	1	1	1	1	1	1	1	1	1
Class III	(Allergic, etc., diseases)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class IV	(Blood diseases)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class V	(Diseases of circulatory system etc.)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class VI	(Diseases of circulatory system)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class VII	(Diseases of respiratory system)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class VIII	(Diseases of digestive system)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class IX	(Accidental and violent causes)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Class XVII	All other causes	2	2	1	1	1	1	1	1	1	1	1	1	1	1

*Includes Hodgkin's disease, leukaemia and alukaemia.

TABLE 16 — DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, CANADA, 1958

Int. abbrev. List. No.	CAUSE OF DEATH												
	Canada		P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
	1957	1958											
B 1	Tuberculosis of respiratory system	1,035	883	4	33	33	433	170	35	21	35	61	10
B 2	Tuberculosis, other forms	148	144	1	3	2	71	16	7	5	9	9	8
B 3	Syphilis and its sequelae	190	171	1	5	11	53	57	1	10	12	20	1
B 4	Typhoid fever	12	3				2						2
B 5	Cholera	25	25				3	4	7		1	8	
B 6	Dysentery, all forms	25	7		1		3	3					
B 7	Scarlet fever and streptococcal sore throat	25	6				2			1	2		
B 8	Diphtheria	63	20	1	4	1	18	4	2	3	2	6	
B 9	Whooping cough	86	68	1	5	8	17	22	6	3	1	4	
B 10	Pneumococcal infections												
B 11	Acute poliomyelitis	26	26			1	5	5	11	1	3		
B 12	Aseptic poliomyelitis												
B 13	Smallpox	108	93		8	4	29	12	5	10	4		1
B 14	Measles												11
B 15	Typhus and other rickettsial diseases												
B 16	Malaria	348	373	2	21	12	101	113	20	2	26	42	2
B 17	All other diseases classified as infective and parasitic	21,390	21,795	138	993	671	5,870	7,874	1,775	1,076	1,304	2,222	13
B 18	All malignant neoplasms*												
B 19	Hodgkin's disease	255	14	1	44	36	212	352	61	50	67	117	1
B 20	Leukaemia and aleukaemia	880	960	6	8	11	83	93	15	29	28	1	1
B 21	Benign and unspecified neoplasms	349	294	2	104	71	570	640	83	99	119	151	2
B 22	Diabetes mellitus	1,928	1,988	10	3	14	13	131	138	15	27	25	
B 23	Anaemias	15,151	15,122	358	831	528	3,056	6,090	913	739	930	1,538	4
B 24	Vascular lesions affecting central nervous system	205	21	1	7	4	91	51	8	15	17	8	
B 25	Nonmeningococcal meningitis	116	80		4	1	40	12	1	7	3		
B 26	Rheumatic fever	1,609	1,402	4	58	34	364	510	84	87	146	1	12
B 27	Chronic rheumatic heart disease	38,278	38,853	285	1,655	1,263	8,719	16,144	2,059	1,784	2,068	4,374	17
B 28	Arteriosclerotic and degenerative heart disease	1,969	2,044	86	17	115	75	623	569	116	138	127	2
B 29	Other diseases of heart disease	3,781	3,710	96	31	160	117	1,327	1,188	179	149	293	1
B 30	Hypertension of heart disease	914	1,162	33	64	26	476	278	47	58	68	98	1
B 31	Hypertension without mention of heart	1,762	760	28	23	25	368	180	26	34	38	1	1
B 32	Influenza	5,398	5,190	38	233	206	1,129	1,791	337	234	338	672	10
B 33	Pneumonia	772	854	24	6	37	18	193	303	53	44	68	4
B 34	Bronchitis	797	856	16	6	43	26	177	326	44	35	13	1
B 35	Ulcer of stomach and duodenum	184	191	6	1		9	63	36	53	54	56	1
B 36	Appendicitis	763	860	21	34	13	23	313	62	44	56	77	4
B 37	Intestinal obstruction and hernia	869	1,070	25	54	18	253	228	82	46	70	94	10
B 38	Gastritis, duodenitis, enteritis and colitis except diarrhoea of newborn												

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TABLE 16—DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, CANADA, 1958 (Cont.)

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
		1957	1958												
B37	Cirrhosis of liver	969	965	8	3	27	18	252	392	36	30	57	100	1	1
B38	Nephritis and nephrosis	2,020	1,844	42	16	66	75	942	424	55	51	59	110	1	3
B39	Hyperplasia of prostate	517	554	15	6	28	27	148	178	37	35	22	56	1	1
B40	Complications of pregnancy, childbirth and the puerperium	255	263	14	1	14	8	95	70	12	13	17	15	1	4
B41	Congenital malformations	2,779	2,830	96	10	129	113	918	919	113	119	211	189	1	12
B42	Birth injuries, postnatal asphyxia and atelectasis	2,731	2,931	88	13	85	79	983	982	138	126	203	230	2	2
B43	Infections of the newborn	798	820	155	28	42	30	326	116	50	26	28	45	...	11
B44	Other diseases peculiar to early infancy and immaturity unqualified	3,951	3,923	153	24	119	158	1,423	1,089	139	197	275	314	3	23
B45	Senility without mention of psychosis, ill-defined and unknown causes	1,700	1,526	253	14	4	304	2,861	1,771	70	46	293	57	1	64
B46	All other diseases	10,685	10,448	222	67	485	304	1,158	1,133	132	580	618	1,125	6	19
B47	Motor vehicle accidents	3,694	3,517	46	21	157	158	1,123	1,130	147	147	301	301	...	...
	Traffic accidents	3,579	3,445	45	21	153	155	1,106	1,110	139	144	287	294	...	...
	Nontraffic accidents	115	72	1	4	3	3	17	27	9	3	14	1	...	...
B48	All other accidents	5,961	5,640	177	33	331	193	1,339	1,907	267	279	381	658	14	61
B49	Suicide and self-inflicted injury	1,247	1,271	11	7	34	30	239	496	85	279	381	172	3	...
B50	Homicide and operations of war	183	203	2	2	4	1	42	79	1	14	26	29	...	3
	All causes	136,579	135,201	3,122	949	6,120	4,528	35,774	48,677	7,145	6,483	8,237	13,741	92	333

*Includes Hodgkin's disease, leukaemia and aleukaemia.

TABLE 17 — DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1958

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
		1957	1958												
B 1	Tuberculosis of respiratory system	6.2	5.2	11.0	4.0	4.6	5.7	8.9	2.9	4.0	2.4	2.9	4.0	...	50.0
B 2	Tuberculosis, other forms	0.9	0.8	3.7	1.0	0.4	0.3	1.5	0.3	0.8	0.2	0.7	0.6	...	40.0
B 3	Syphilis and its sequelae	1.1	1.0	0.5	1.0	0.7	1.9	†	1.0	0.6	1.1	1.0	1.3	7.7	...
B 4	Typhoid fever	0.1	†	...	...	...	...	...	...	0.1	...	...	...	...	...
B 5	Cholera	...	...	...	...	...	...	...	...	0.1	...	...	0.5	...	10.0
B 6	Dysentery, all forms	0.2	0.1	...	...	...	...	0.1	0.1	0.8	...	...	...	...	...
B 7	Scarlet fever and streptococcal sore throat	0.2	†	...	...	0.1	0.2	†	0.1	0.2	0.1	0.2	...	...	...
B 8	Diphtheria	0.1	†	...	...	...	...	...	...	0.1	0.3	0.2	0.4	...	...
B 9	Whooping cough	0.4	0.2	...	1.0	0.6	0.4	0.4	0.1	0.2	0.3	0.1	0.3	...	...
B 10	Meningococcal infections	0.5	0.4	0.5	...	0.7	1.4	0.3	0.4	0.7	0.3	0.1	0.3	...	...
B 11	Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B 12	Acute poliomyelitis	0.2	0.2	...	...	...	0.2	0.1	0.1	1.3	...	0.1	0.2	...	...
B 13	Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B 14	Measles	0.7	0.5	2.1	...	1.1	0.7	0.6	0.2	0.6	1.1	0.3	...	7.7	55.0
B 15	Typhus and other rickettsial diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B 16	Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B 17	All other diseases classified or infective and parasitic	†	2.2	2.3	2.0	3.0	2.1	2.1	1.9	2.3	2.3	2.2	2.7	7.7	10.0
B 18	All malignant neoplasms*	128.9	127.8	103.0	138.0	139.9	116.3	120.2	135.7	135.1	121.2	108.6	143.9	100.0	40.0
B 19	Hodgkin's disease	1.4	1.5	...	1.0	1.5	1.2	1.4	1.6	2.1	1.4	1.3	1.7	...	5.0
B 20	Leukaemia and aleukaemia	5.4	5.6	...	6.0	6.2	6.2	4.3	6.1	7.0	5.6	5.6	7.6	...	...
B 21	Benign and unspecified neoplasms	2.1	1.7	2.1	2.0	1.1	1.9	1.7	1.6	1.7	1.7	2.4	1.8	7.7	...
B 22	Diabetes mellitus	11.2	11.0	5.0	9.0	14.6	12.3	11.7	11.0	9.5	11.1	9.9	9.8	...	5.0
B 23	Vascular lesions affecting central nervous system	2.0	2.3	2.3	3.0	2.0	2.3	2.7	2.4	1.7	2.5	2.2	1.6	...	...
B 24	Nonmeningococcal meningitis	91.3	88.7	81.7	133.0	117.0	91.5	62.6	104.9	104.9	83.2	77.4	99.6	30.8	10.0
B 25	Rheumatic fever	1.2	1.3	3.7	1.0	1.0	0.6	0.2	0.8	0.2	0.1	0.8	0.5	...	...
B 26	Chronic rheumatic heart disease	0.7	0.5	0.9	...	...	...	...	...	...	...	...	...	...	...
B 27	Arteriosclerotic and degenerative heart disease	9.7	8.2	7.8	4.0	8.2	5.9	7.5	8.8	9.2	9.5	7.2	9.5	7.7	...
B 28	Other diseases of heart	230.7	227.9	108.0	285.0	233.1	218.9	178.5	273.2	236.7	200.9	172.2	283.3	130.8	60.0
B 29	Hypertension with heart disease	11.9	12.0	19.6	17.0	16.2	13.0	12.8	9.8	13.2	15.5	10.6	11.2	15.4	15.0
B 30	Hypertension without mention of heart	22.8	21.8	31.0	31.0	22.5	20.3	27.7	20.5	20.6	19.9	12.4	19.0	7.7	...
B 31	Influenza	5.5	6.8	7.5	13.0	9.0	4.5	9.7	4.8	5.4	6.5	5.7	6.3	7.7	...
B 32	Pneumonia	10.6	4.5	6.4	10.0	3.2	4.3	7.5	3.1	3.0	3.8	1.7	2.2	7.7	50.0
B 33	Bronchitis	32.5	30.4	36.3	38.0	32.8	35.7	23.1	30.9	38.7	28.4	28.1	43.5	76.9	215.0
B 34	Ulcer of stomach and duodenum	4.7	5.0	5.5	6.0	5.2	3.1	4.0	5.2	6.1	5.0	5.7	6.7	...	20.0
B 35	Appendicitis	4.8	5.0	3.7	6.0	6.1	4.5	3.6	5.6	5.1	4.3	4.8	7.8	7.7	...
B 36	Intestinal obstruction and hernia	1.1	1.1	1.1	1.1	1.1	1.6	1.3	1.0	1.4	1.2	0.9	0.8	...	5.0
B 37		4.6	5.0	4.8	4.0	4.8	3.1	4.4	5.4	7.2	6.1	4.7	5.0	...	...

TABLE 17 — DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL ABBREVIATED LIST OF 50 CAUSES, BY PROVINCES, 1958 (Continued)

Int. abbrev. List. No.	CAUSE OF DEATH	Canada		Nfld.	P.E.I.	N.S.	N.B.	Quebec	Ontario	Manitoba	Sask.	Alberta	B.C.	Yukon	N.W.T.
		1957	1958												
B36	Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	5.2	6.3	5.7	15.0	7.6	7.6	8.1	3.9	9.4	5.2	5.8	6.1	30.8	50.0
B37	Diarrhoea of liver	5.8	5.7	1.8	3.0	3.8	3.1	6.0	6.8	4.1	3.4	4.7	6.5	7.7	5.0
B38	Nephritis and nephrosis	12.2	10.8	9.6	16.0	9.3	13.0	19.3	7.3	6.3	5.7	4.9	7.1	7.7	15.0
B39	Hyperplasia of prostate	3.1	3.2	3.4	6.0	3.9	4.7	3.0	3.1	4.3	3.9	1.8	3.6	7.7	5.0
B40	Congenital hypothyroidism	1.5	1.5	3.2	1.0	2.0	1.4	1.9	1.2	1.4	1.5	1.4	1.0	...	20.0
B41	Congenital hypoparathyroidism	16.8	16.6	21.9	10.0	18.2	19.6	18.8	15.8	13.0	13.4	17.6	12.2	7.7	60.0
B42	Birth injuries postnatal asphyxia and alelectasis	19.5	17.2	20.1	13.0	12.0	13.7	20.1	16.9	15.9	14.2	16.9	14.9	15.4	10.0
B43	Infections of the newborn	4.8	23.2	8.0	3.0	3.9	5.2	6.7	2.0	5.7	2.9	2.2	2.9	...	55.0
B44	Other diseases peculiar to early infancy and immaturity unqualified	20.9	23.0	38.4	28.0	16.8	27.4	29.1	18.8	16.0	22.2	22.9	20.3	23.1	115.0
B45	Senility without mention of psychosis, ill-defined and unknown causes	10.9	9.0	57.8	1.0	68.3	57.7	56.9	2.9	8.0	5.2	24.4	3.7	7.7	320.0
B46	All other diseases	64.4	61.3	50.7	67.0	68.3	57.4	53.2	60.8	69.1	68.3	51.5	72.9	46.2	95.0
BE47	Motor vehicle accidents	22.3	20.6	10.5	21.0	22.1	27.4	23.2	18.5	13.1	16.2	23.1	18.5	...	...
	Traffic accidents	21.6	20.2	10.3	21.0	21.5	26.9	22.6	10.4	10.1	10.3	23.9	18.9	...	...
	Nontraffic accidents	0.7	0.4	0.2	...	0.6	0.5	0.3	0.4	0.2	0.3	1.7	0.3	...	...
BE48	All other accidents	35.9	33.1	40.4	33.0	46.6	33.4	27.4	32.9	30.7	37.4	31.7	42.6	107.7	305.0
BE49	Suicide and self-inflicted injury	7.5	7.5	2.5	7.0	4.8	5.2	4.9	8.5	9.8	9.3	9.2	11.1	23.1	...
BE50	Homicide and operations of war	1.1	1.2	0.5	2.0	0.6	0.2	0.9	1.4	0.1	1.6	2.2	1.9	...	15.0
	All causes	823.3	793.1	712.8	949.0	862.0	784.7	732.5	838.8	821.3	730.1	685.8	890.0	707.7	1665.0

*Includes Hodgkin's disease, leukaemia and aleukaemia.

†Less than 0.1 per 100,000 population.

TABLE 18—CERTAIN CAUSES OF DEATH, BY NUMBERS AND RATES FOR EACH YEAR OF THE LAST DECENNIAL PERIOD

CAUSE OF DEATH	1958		1957		1956		1955		1954		1953		1952		1951		1950		1949	
	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000	Number of Deaths	Rate per 100,000
Diseases of the Heart	2431	202	2371	204	2288	204	2420	227	2345	225	2274	227	2247	231	2113	224	2046	228	2033	233
Cancer	1304	108	1262	108	1251	104	1110	1234	1164	112	1129	112	1072	110	1085	113	997	110	957	109
Diseases of the Arteries	267	22	254	21	173	15	173	16	155	14	148	14	136	14	129	13	133	14	128	14
Violent Deaths (Suicides excepted)	708	58	640	55	667	59	672	63	623	59	667	66	589	60	568	60	573	64	596	68
Pneumonia (all forms)	338	28	352	30	325	28	326	30	253	24	324	32	298	30	341	36	275	30	376	43
Pulmonary Tuberculosis	35	2	60	5	36	3	64	6	45	4	51	5	91	9	119	12	137	15	155	17
Influenza	21	1	135	11	35	3	44	4	14	1	33	3	47	4	14	1	26	12	41	4
Nephritis	59	4	60	5	77	6	62	6	19	1	108	10	14	1	18	1	22	2	27	2
Appendicitis	11	1	105	1	118	1	96	1	83	1	72	1	94	1	86	1	82	1	80	1
Suicides	11	1	105	1	118	1	96	1	83	1	72	1	94	1	86	1	82	1	80	1
Cerebral Haemorrhage	930	77	935	80	808	71	856	80	842	81	851	84	727	74	756	80	693	77	666	76
Diabetes Mellitus	119	9	141	12	98	8	123	11	112	10	99	9	104	10	89	9	91	10	156	17
Diarrhoea and Enteritis	69	5	59	5	64	5	54	5	69	6	47	4	77	7	60	6	69	7	63	7
Poisoning Cases	17	1	12	1	14	1	15	1	11	1	21	2	15	1	15	1	19	2	25	2
Whooping Cough	2	0	4	0	3	0	1	0	7	0	5	0	8	0	6	0	3	0	5	0
Scarlet Fever	2	0	4	0	3	0	1	0	7	0	5	0	8	0	6	0	11	1	12	1
Diphtheria	2	0	6	0	3	0	1	0	2	0	3	0	2	0	1	0	1	0	1	0
Typhoid and Paratyphoid	4	0	16	1	2	0	24	2	6	0	8	0	7	0	12	0	8	0	19	0
Measles	4	0	16	1	2	0	24	2	6	0	8	0	7	0	12	0	8	0	19	0
Poliomyelitis and Infectious Encephalitis	8	0	8	0	9	0	8	0	28	2	108	10	79	8	2	0	2	0	2	0

[illegible]

[illegible]

AE147 All other accidental causes.....	Male Female	5 2
AE148 Suicide and self-inflicted injury.....	Male Female	2 1
AE149 Homicide and injury purposely inflicted by other persons (not in war).....	Male Female	2 2
XXVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO NATURE OF INJURY).	Total Male Female	35 27 8
AN138 Fracture of skull.....	Male Female Male Female	5 27 4 1
AN139 Fracture of spine and trunk.....	Male Female	1 1
AN140 Fracture of limbs.....	Male Female	1 1
AN143 Head injury (excluding fracture).....	Male Female	5 4
AN144 Internal injury of chest, abdomen, and pelvis.....	Male Female Male Female	4 4 4 4
AN145 Laceration and open wounds.....	Male Female	4 4
AN147 Effects of foreign body entering through orifice.....	Male Female	1 1
AN148 Burns.....	Male Female	2 1
AN149 Effects of poisons.....	Male Female	3 2
AN150 All other and unspecified effects of external causes.....	Male Female	4 1

[illegible]

XI. DELIVERIES AND COMPLICATIONS OF PREGNANCY, CHILD BIRTH, AND THE PUERPERUM	
A118 Abortion without mention of sepsis or toxæmia	
XIV. CONGENITAL MALFORMATIONS	
A128 Congenital malformations of circulatory system	
A129 All other congenital malformations	
XV. CERTAIN DISEASES OF EARLY INFANCY	
A130 Birth injuries	
A131 Postnatal asphyxia and atelectasis	
A132 Infections of the newborn	
A133 Haemolytic disease of newborn	
A134 All other defined diseases of early infancy	
A135 Ill-defined diseases peculiar to early infancy, and immaturity unqualified	
XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS	
A136 Senility without mention of psychosis	
A137 Ill-defined and unknown causes	
XVII. ACCIDENTS, POISONINGS AND VIOLENCE (CLASSIFICATION ACCORDING TO EXTERNAL CAUSE)	
AE138 Motor vehicle accidents	
A Traffic accidents (810-825)	

[illegible]

TABLE 21 — SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE AT DEATH, ALBERTA, 1958

[illegible]

TABLE 22 --- SELECTED CAUSES OF INFANT DEATH OF TREATY INDIANS BY SEX AND AGE AT DEATH, ALBERTA, 1958

[illegible]

TABLE 23A—LIVE BIRTHS OF INDIANS, ALBERTA, BY MONTHS, 1958
(ALL INDIANS)

	MONTHS												
	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	1684	142	152	141	126	150	122	116	125	139	171	149	151

TABLE 23B—LIVE BIRTHS OF INDIANS, ALBERTA, BY MONTHS, 1958
(TREATY INDIANS)

	MONTHS												
	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	955	80	84	71	72	79	69	69	70	89	99	86	87

TABLE 24—LEGITIMATE AND ILLEGITIMATE BIRTHS OF INDIANS (EXCLUSIVE OF
STILLBIRTHS) IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHER, 1958
(ALL INDIANS)

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1684	882	802	1151	591	560	533	291	242

TABLE 25—LEGITIMATE AND ILLEGITIMATE BIRTHS OF INDIANS (EXCLUSIVE OF
STILLBIRTHS) IN ALBERTA, BY PLACE OF RESIDENCE OF MOTHER, 1958
(TREATY INDIANS)

	Total Births			Legitimate			Illegitimate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	955	495	460	645	327	318	310	168	142

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TABLE 26A—LIVE BIRTHS OF INDIANS BY AGES OF PARENTS, ALBERTA, 1958

AGE OF MOTHER (years)	AGE OF FATHER											Total born to married mothers	Born to un- married mothers	Born to all mothers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over	Not stated		
12 years													1	1
13 years													1	1
14 years													3	3
15 years		1											5	6
16 years		5	1	1									17	24
17 years	6	15	6	1								1	29	68
18 years	1	19	9	6									35	41
19 years	1	23	19	5									48	76
20 years	2	26	19	9	1							1	58	102
21 years		19	23	7	2	3						2	56	97
22 years		10	37	8	1	1							59	84
23 years		13	30	9	4	3	1	1					61	93
24 years		7	30	14	5			2	1				59	93
25 years		5	30	23	3								61	86
26 years		2	31	20	11	2	3						69	93
27 years		2	16	15	10								47	67
28 years		2	12	25	6	5	2	1	1			1	55	75
29 years		1	1	24	16	4	3		1	2			58	76
30 years		4	8	23	13	3	3	1		1			56	70
31 years		2	3	14	4	5	2	1	3	1	1		36	45
32 years		2	12	16	12	2	2		1	1			46	57
33 years		1		8	2	2	1						14	18
34 years		3	6	20	6	5	1						41	52
35 years		2	6	14	7	8	1	1	3				42	51
36 years		2	15	7	4	2	2			1			33	39
37 years				6	11	6	2						25	31
38 years		1	3	11	3	11	2	1					30	36
39 years				5	10	11	2	1	1			1	31	32
40 years				3	10	6	1	1	1				22	24
41 years				2	7	7		1					17	20
42 years					1	1	3						5	8
43 years					1	4	4	1	1				11	11
44 years							3	2					5	6
45 years					1	1	2	1					5	6
46 years							1						1	1
47 years							1						1	1
48 years														
49 years														
50 and over														
Not stated		1										1	2	3
Total Fathers	10	160	290	234	178	118	95	29	16	10	2	9	1151	1684

TABLE 28: LIVE BIRTHS AND LIVE BIRTHS IN HOSPITAL BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS, ALBERTA, 1958

CENSUS DIVISIONS	TOTAL BIRTHS				BIRTHS IN HOSPITALS			
	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence; Residence Elsewhere	By Residence; Occurrence Elsewhere
ALBERTA	36,733	36,842	304	413	35,894	36,003	301	410
Division No. 1	885	975	46	136	868	957	46	135
Division No. 2	2,400	2,196	257	53	2,341	2,141	253	53
Division No. 3	894	965	48	119	837	927	48	118
Division No. 4	421	445	51	75	408	432	51	75
Division No. 5	743	954	52	263	703	922	43	262
Division No. 6	8,707	8,447	428	168	8,681	8,412	428	159
Division No. 7	1,031	1,065	75	109	1,023	1,056	75	108
Division No. 8	2,127	2,055	185	113	2,097	2,027	182	112
Division No. 9	482	409	131	58	459	387	130	58
Division No. 10	1,381	1,624	124	367	1,370	1,614	123	367
Division No. 11	12,520	11,978	863	321	12,492	11,948	861	317
Division No. 12	1,554	1,618	79	143	1,268	1,329	79	140
Division No. 13	962	1,081	148	267	934	1,054	147	267
Division No. 14	296	611	11	326	277	592	9	324
Division No. 15	2,330	2,419	49	138	2,116	2,205	46	135

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TABLE 29: LIVE BIRTHS BY OCCURRENCE AND RESIDENCE FOR URBAN PLACES
OF 1,000 POPULATION AND OVER, ALBERTA, 1958

CITY, TOWN OR VILLAGE	Total Live Births				Live Births in Hospitals			
	Total by Occurrence	Total by Residence	By Occurrence Residence Elsewhere	By Residence; Occurrence Elsewhere	Total by Occurrence	Total by Residence	By Occurrence Residence Elsewhere	By Residence; Occurrence Elsewhere
Athabasca	209	57	156	4	209	56	156	3
Barrhead	217	51	167	1	215	50	166	1
Beverly .....	...	352	...	352	...	352	...	352
Blairmore	3	38	3	38	3	37	3	37
Bonnyville	207	76	138	7	206	76	137	7
Bow Island .....	...	25	...	25	...	25	...	25
Bowness .....	...	284	...	284	...	284	...	284
Brooks	229	80	153	4	228	80	152	4
Calgary	8,036	6,737	1,418	119	8,030	6,730	1,418	118
Camrose	384	154	236	6	384	154	236	6
Cardston	192	90	111	9	192	90	111	9
Claresholm	159	80	85	6	159	80	85	6
Coaldale	88	75	36	23	87	74	36	23
Cold Lake	196	81	137	22	196	72	137	13
Coleman	6	39	1	34	6	39	1	34
Devon	34	40	10	16	34	40	10	16
Didsbury	160	45	122	7	159	45	121	7
Drayton Valley	64	203	19	158	63	202	19	158
Drumheller	306	114	199	7	306	114	199	7
Edmonton	12,077	8,570	3,609	102	12,066	8,560	3,608	102
Edson	241	140	137	36	239	139	136	36
Fairview	171	61	115	5	171	61	115	5
Forest Lawn .....	...	150	...	150	...	150	...	150
Fort McLeod	111	86	37	12	111	86	37	12
Fort Saskatchewan	2	108	2	108	...	108	...	108
Grande Prairie	515	311	224	20	514	309	224	19
Hanna	180	75	108	3	180	75	108	3
High Prairie	318	83	240	5	317	82	240	5
High River	232	50	185	3	232	50	185	3
Innisfail	214	87	135	8	213	86	135	8
Jasper Place .....	...	847	...	847	...	847	...	847
Lacombe	274	101	175	2	274	101	175	2
Leduc .....	...	82	...	82	...	82	...	82
Lethbridge	1,441	921	542	22	1,441	921	542	22
Lloydminster .....	...	134	...	134	...	134	...	134
Magrath	72	34	43	5	71	33	42	4
McLennan	218	42	185	9	218	42	185	9
McMurray	53	22	34	3	53	22	34	3
Medicine Hat	869	587	294	12	868	586	294	12
Nanton .....	...	27	...	27	...	27	...	27
Olds	216	81	141	6	216	81	141	6
Peace River	239	132	117	10	238	132	116	10
Pincher Creek	208	100	117	9	207	98	117	8
Ponoka	205	116	98	9	205	116	98	9
Raymond	93	43	52	2	91	41	52	2
Redcliff .....	...	56	...	56	...	56	...	56
Red Deer	810	605	230	25	810	605	230	25
Redwater .....	...	45	...	45	...	45	...	45
Rocky Mountain House	141	90	57	6	137	85	57	5
St. Albert	1	65	1	65	1	65	1	65
St. Paul	262	97	181	16	262	97	181	16
Stettler	243	122	132	11	243	122	132	11
Stony Plain	1	53	1	53	...	52	...	52
Sylvan Lake .....	...	45	...	45	...	45	...	45
Taber	411	131	286	6	410	131	285	6
Three Hills	141	50	95	4	140	49	95	4
Vegreville	172	68	112	8	172	68	112	8
Vermilion	168	68	107	7	167	67	107	7
Vulcan	117	39	83	5	117	39	83	5
Wainwright	261	143	127	9	261	142	127	8
Westlock	274	54	225	5	274	54	225	5
Wetaskiwin	322	124	214	16	322	124	214	16

TABLE 30—LIVE BIRTHS BY MONTH, 1958, ALBERTA

	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	36,842	2,988	2,761	3,199	3,112	3,266	3,120	2,974	2,976	3,178	3,188	3,068	3,012

TABLE 31: LIVE BIRTHS FOR CENSUS DIVISIONS BY TYPE OF ATTENDANCE, ALBERTA, 1958

CENSUS DIVISIONS	Total	Attended by			
		Physician	Nurse	Midwife	Unattended and Not Stated
ALBERTA	36,842	36,209	223	215	195
Division No. 1	975	959	.....	13	3
Division No. 2	2,196	2,149	4	33	10
Division No. 3	965	928	11	24	2
Division No. 4	445	433	2	9	1
Division No. 5	954	887	53	4	10
Division No. 6	8,447	8,425	5	5	12
Division No. 7	1,065	1,058	.....	4	3
Division No. 8	2,055	2,038	2	11	4
Division No. 9	409	372	24	9	4
Division No. 10	1,624	1,618	.....	4	2
Division No. 11	11,978	11,965	1	6	6
Division No. 12	1,618	1,527	40	18	33
Division No. 13	1,081	1,055	7	7	12
Division No. 14	611	605	2	4
Division No. 15	2,419	2,190	72	68	89

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TABLE 32: LIVE BIRTHS IN INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, BY TYPE OF ATTENDANCE, ALBERTA, 1958

CITY, TOWN OR VILLAGE	Total	Attended by			
		Physician	Nurse	Midwife	Unattended and Not Stated
Athabasca	57	56	1	.....	.....
Barrhead	51	51	.....	.....	.....
Beverly	352	352	.....	.....	.....
Blairmore	38	38	.....	.....	.....
Bonnyville	76	76	.....	.....	.....
Bow Island	25	25	.....	.....	.....
Bowness	284	284	.....	.....	.....
Brooks	80	79	.....	.....	1
Calgary	6,737	6,730	1	.....	6
Camrose	154	154	.....	.....	.....
Cardston	90	90	.....	.....	.....
Claresholm	80	80	.....	.....	.....
Coaldale	75	75	.....	.....	.....
Cold Lake	81	81	.....	.....	.....
Coleman	39	39	.....	.....	.....
Devon	40	40	.....	.....	.....
Didsbury	45	45	.....	.....	.....
Drayton Valley	203	203	.....	.....	.....
Drumheller	114	114	.....	.....	.....
Edmonton	8,570	8,567	1	1	1
Edson	140	140	.....	.....	.....
Fairview	61	59	2	.....	.....
Forest Lawn	150	150	.....	.....	.....
Fort McLeod	86	86	.....	.....	.....
Fort Saskatchewan	108	108	.....	.....	.....
Grande Prairie	311	311	.....	.....	.....
Hanna	75	75	.....	.....	.....
High Prairie	83	82	.....	.....	1
High River	50	50	.....	.....	.....
Innisfail	87	87	.....	.....	.....
Jasper Place	847	847	.....	.....	.....
Lacombe	101	101	.....	.....	.....
Leduc	82	82	.....	.....	.....
Lethbridge	921	921	.....	.....	.....
Lloydminster	134	134	.....	.....	.....
Magrath	34	33	.....	1	.....
McLennan	42	42	.....	.....	.....
McMurray	22	22	.....	.....	.....
Medicine Hat	587	587	.....	.....	.....
Nanton	27	27	.....	.....	.....
Olds	81	81	.....	.....	.....
Peace River	132	130	1	.....	1
Pincher Creek	100	99	.....	.....	1
Ponoka	116	116	.....	.....	.....
Raymond	43	41	.....	2	.....
Redcliff	56	56	.....	.....	.....
Red Deer	605	605	.....	.....	.....
Redwater	45	45	.....	.....	.....
Rocky Mountain House	90	87	1	1	1
St. Albert	65	65	.....	.....	.....
St. Paul	97	97	.....	.....	.....
Stettler	122	122	.....	.....	.....
Stony Plain	53	53	.....	.....	.....
Sylvan Lake	45	45	.....	.....	.....
Taber	131	131	.....	.....	.....
Three Hills	50	50	.....	.....	.....
Vegreville	68	68	.....	.....	.....
Vermilion	68	68	.....	.....	.....
Vulcan	39	39	.....	.....	.....
Wainwright	143	142	.....	.....	1
Westlock	54	54	.....	.....	.....
Wetaskiwin	124	124	.....	.....	.....

TABLE 33—LIVE BIRTHS BY AGES OF PARENTS, ALBERTA, 1958

Age of Mother (years)	AGE OF FATHER											Total born to married mothers	Born to un- married mothers	Born to all mothers	
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over				
12 years	1	1
13 years	1	1
14 years	1	1
15 years	1	1
16 years	1	1
17 years	1	1
18 years	1	1
19 years	1	1
20 years	1	1
21 years	1	1
22 years	1	1
23 years	1	1
24 years	1	1
25 years	1	1
26 years	1	1
27 years	1	1
28 years	1	1
29 years	1	1
30 years	1	1
31 years	1	1
32 years	1	1
33 years	1	1
34 years	1	1
35 years	1	1
36 years	1	1
37 years	1	1
38 years	1	1
39 years	1	1
40 years	1	1
41 years	1	1
42 years	1	1
43 years	1	1
44 years	1	1
45 years	1	1
46 years	1	1
47 years	1	1
48 years	1	1
49 years	1	1
50 and over	1	1
Not stated	1	1
Total Fathers	308	6,053	11,200	8,363	4,980	2,428	1,082	348	110	28	26	20	34,946	1,896	36,842

TABLE 35: MULTIPLE BIRTHS BY AGE OF MOTHER, ALBERTA, 1958

Age of Mother (years)	Total Children Born	Single		Sets of twins			Sets of triplets			
		Liveborn	Stillborn	Both Liveborn	1 liveborn 1 stillborn	Both Stillborn	All Liveborn	2 liveborn 1 stillborn	1 liveborn 2 stillborn	All Stillborn
Total	37,237	36,067	371	378	16	4	1	.....	.....	.....
12 years	1	1	.....	.....	.....	.....	.....	.....	.....	.....
13 years	1	1	.....	.....	.....	.....	.....	.....	.....	.....
14 years	18	18	.....	.....	.....	.....	.....	.....	.....	.....
15 years	55	55	.....	.....	.....	.....	.....	.....	.....	.....
16 years	210	208	.....	.....	.....	.....	.....	.....	.....	.....
17 years	568	557	5	3	.....	.....	.....	.....	.....	.....
18 years	1,076	1,049	13	7	.....	.....	.....	.....	.....	.....
19 years	1,561	1,535	10	7	1	.....	.....	.....	.....	.....
20 years	2,059	2,009	18	16	.....	.....	.....	.....	.....	.....
21 years	2,244	2,188	14	19	2	.....	.....	.....	.....	.....
22 years	2,426	2,380	5	18	.....	1	1	.....	.....	.....
23 years	2,389	2,345	20	11	1	.....	.....	.....	.....	.....
24 years	2,433	2,381	16	18	.....	.....	.....	.....	.....	.....
25 years	2,415	2,341	18	27	1	.....	.....	.....	.....	.....
26 years	2,242	2,160	22	27	3	.....	.....	.....	.....	.....
27 years	2,104	2,026	22	26	1	1	.....	.....	.....	.....
28 years	1,987	1,931	22	17	.....	.....	.....	.....	.....	.....
29 years	1,858	1,790	20	24	.....	.....	.....	.....	.....	.....
30 years	1,658	1,597	19	21	.....	.....	.....	.....	.....	.....
31 years	1,373	1,311	14	24	.....	.....	.....	.....	.....	.....
32 years	1,381	1,340	13	13	1	.....	.....	.....	.....	.....
33 years	1,229	1,185	14	15	.....	.....	.....	.....	.....	.....
34 years	1,130	1,074	18	18	.....	1	.....	.....	.....	.....
35 years	966	920	16	14	1	.....	.....	.....	.....	.....
36 years	876	821	21	16	1	.....	.....	.....	.....	.....
37 years	734	708	8	8	1	.....	.....	.....	.....	.....
38 years	634	601	14	12	.....	.....	.....	.....	.....	.....
39 years	514	498	8	3	1	.....	.....	.....	.....	.....
40 years	336	309	5	9	2	.....	.....	.....	.....	.....
41 years	244	241	1	1	.....	.....	.....	.....	.....	.....
42 years	189	184	5	.....	.....	.....	.....	.....	.....	.....
43 years	142	131	5	3	.....	.....	.....	.....	.....	.....
44 years	75	71	2	.....	.....	1	.....	.....	.....	.....
45 years	52	49	3	.....	.....	.....	.....	.....	.....	.....
46 years	24	24	.....	.....	.....	.....	.....	.....	.....	.....
47 years	12	12	.....	.....	.....	.....	.....	.....	.....	.....
48 years	2	2	.....	.....	.....	.....	.....	.....	.....	.....
49 years	2	2	.....	.....	.....	.....	.....	.....	.....	.....
50 and over .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Not stated	12	12	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 36: MARRIAGES BY MONTH OF MARRIAGE, 1958, ALBERTA

Total	10,186
January	379
February	541
March	509
April	803
May	863
June	1,244
July	1,047
August	1,248
September	875
October	927
November	976
December	774

TABLE 37—MARRIAGES—AGES OF BRIDE BY AGE OF GROOM, ALBERTA, 1958

[illegible]

TABLE 38: MARRIAGES, MARITAL STATUS OF BRIDEGROOM BY STATUS OF BRIDE, 1958, ALBERTA

	Total Marriages	MARRIAGES BETWEEN								
		Bachelors and			Widowers and			Divorced Men and		
		Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women	Spinsters	Widows	Divorced Women
Alberta	10,186	8,645	214	423	121	218	49	318	70	128

TABLE 39—MARRIAGES, MARITAL STATUS BY AGE OF BRIDEGROOM, 1958, ALBERTA

AGES	MARITAL STATUS			
	Total	Bachelors	Widowers	Divorced Men
Under 20 years	598	598		
20 - 24	4,589	4,571	4	14
25 - 29	2,758	2,655	8	95
30 - 34	1,013	881	17	115
35 - 39	391	278	25	88
40 - 44	229	124	28	77
45 - 49	161	78	33	50
50 - 54	132	36	49	47
55 - 59	94	24	59	11
60 - 64	69	18	39	12
65 - 69	69	11	52	6
70 - 74	49	3	45	1
75+	33	4	29	
Not stated	1	1		
Total	10,186	9,282	388	516

TABLE 40—MARRIAGES, MARITAL STATUS BY AGE OF BRIDE, 1958, ALBERTA

AGES	MARITAL STATUS			
	Total	Spinsters	Widows	Divorced Women
Under 20	3,405	3,398	2	5
20 - 24	4,069	3,966	17	86
25 - 29	1,277	1,088	48	141
30 - 34	497	335	37	125
35 - 39	334	154	61	119
40 - 44	194	76	65	53
45 - 49	138	37	62	39
50 - 54	97	16	53	28
55 - 59	62	10	49	3
60 - 64	36	2	33	1
65 - 69	42		42	
70 - 74	25		25	
75+	10	2	8	
Not stated				
Total	10,186	9,084	502	600

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TABLE 41 — MARRIAGES, BIRTHPLACE OF GROOM BY BIRTHPLACE OF BRIDE, ALBERTA, 1958

BIRTHPLACE OF GROOM	BIRTHPLACE OF BRIDE															Total Grooms			
	CANADA																		
	Total	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories	Province Unspecified	British Isles and Possessions				
																	Europe	Asia	United States	Other	Unspecified
Canada	7,914	6	14	50	27	54	193	226	1051	5598	207	2	7	...	203	195	8	69	4
Newfoundland	18	...	...	3	...	...	...	2	1	10	1	...	...	...	3	1	...	...	...
Prince Edward Island	33	...	3	1	...	...	6	1	15	16	...	...	...	...	4	5	...	1	...
Nova Scotia	105	...	...	10	1	...	2	6	50	50	2	...	...	...	4	5	...	2	...
New Brunswick	37	...	...	...	7	2	3	2	4	18	...	...	...	...	4	6	...	1	...
Quebec	106	...	...	1	...	8	3	3	14	56	4	...	...	...	7	2	...	1	...
Ontario	362	1	1	3	3	6	42	3	57	221	11	...	...	...	18	20	...	8	...
Manitoba	323	...	...	3	1	1	9	37	43	190	14	...	...	...	13	6	...	5	...
Saskatchewan	1,260	...	...	4	4	5	25	34	317	762	31	...	...	...	25	30	3	13	...
British Columbia	5,348	2	6	22	10	30	94	115	559	4123	102	1	4	...	118	118	4	38	2
Yukon	265	...	...	3	1	2	7	9	32	149	41	1	...	...	13	6	1	...	...
Northwest Territories	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Province Unspecified	6	...	...	...	...	...	1	...	...	3	...	...	...	...	1	...	...	...	...
British Isles and possessions	412	2	1	2	...	4	15	10	44	161	15	...	...	...	122	25	...	9	1
Europe	1,433	473	3	2	3	5	24	17	74	331	11	2	1	...	39	899	...	16	5
Asia	130	10	...	...	...	...	...	...	...	6	2	...	...	...	1	3	116	...	...
United States	280	181	2	...	1	1	12	7	24	132	2	...	...	...	18	14	...	67	...
Other	16	10	...	...	...	1	1	...	2	6	...	...	...	...	1	2	...	2	1
Unspecified	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Total	10,186	8	20	54	31	64	245	280	1197	6235	237	4	10	...	384	1138	125	163	11

TABLE 42 — MARRIAGES—RELIGIOUS DENOMINATION OF GROOM BY RELIGIOUS DENOMINATION OF BRIDE, ALBERTA, 1958

[illegible]

TABLE 42 — MARRIAGES—RELIGIOUS DENOMINATION OF GROOM BY RELIGIOUS DENOMINATION OF BRIDE, ALBERTA, 1958 (Continued)

RELIGIOUS DENOMINATION OF GROOM		RELIGIOUS DENOMINATION OF BRIDE	
Total Grooms	10,186	42	1,006
Methodists	34	6	342
Moravian Church	19	1	31
Mormons	185	1	6
Non-denominational	209	24	1
Oriental religions	67	10	3
Pentecostal Assemblies	141	1	2
Plymouth Brethren	7	5	1
Presbyterians	362	1	7
Reformed Churches	154	55	3
Roman Catholics	2,380	3	6
Savation Army	27	113	22
Society of Friends	2	2	2
Spiritualists	2	1	1
Swedenborgians	2	1	1
Unitarians	6	2	1
United Church of Canada	2,955	2	66
Other religions	20	250	7
Non-religious denominations	12	4	1
Unspecified or unknown	10,186	3	342
Total brides	10,186	42	1,006
Methodists	34	6	342
Moravian Church	19	1	31
Mormons	185	1	6
Non-denominational	209	24	1
Oriental religions	67	10	3
Pentecostal Assemblies	141	1	2
Plymouth Brethren	7	5	1
Presbyterians	362	1	7
Reformed Churches	154	55	3
Roman Catholics	2,380	3	6
Savation Army	27	113	22
Society of Friends	2	2	2
Spiritualists	2	1	1
Swedenborgians	2	1	1
Unitarians	6	2	1
United Church of Canada	2,955	2	66
Other religions	20	250	7
Non-religious denominations	12	4	1
Unspecified or unknown	10,186	3	342
Total brides	10,186	42	1,006

TABLE 43: STILLBIRTHS BY SEX AND PERIOD OF GESTATION, 1958, ALBERTA

PERIOD OF GESTATION	Male	Female
28 weeks	17	11
29 weeks	5	7
30 weeks	17	8
31 weeks	7	5
32 weeks	16	10
33 weeks	6	5
34 weeks	10	9
35 weeks	12	6
36 weeks	20	20
37 weeks	12	7
38 weeks	16	17
39 weeks	9	8
40 weeks	57	40
41 weeks	6	4
42 weeks	6	7
43 weeks	3	2
44 weeks .....	....	....
45 weeks .....	....	....
46 weeks .....	....	....
47 weeks .....	....	....
48 weeks .....	....	....
49 weeks .....	....	....
Not stated	8	2

TABLE 44: RATIO OF MALE TO FEMALE BIRTHS, AND OF BIRTHS TO DEATHS

Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths	Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths
1905	1.059	3.13	1932	1.052	3.08
1906	1.094	2.07	1933	1.053	3.01
1907	1.075	2.96	1934	1.032	3.04
1908	1.077	2.73	1935	1.055	2.81
1909	1.086	2.59	1936	1.049	2.57
1910	1.065	2.69	1937	1.019	2.38
1911	1.103	2.43	1938	1.046	2.70
1912	1.084	2.43	1939	1.046	2.85
1913	1.053	2.67	1940	1.033	2.79
1914	1.081	3.30	1941	1.054	2.71
1915	1.000	3.74	1942	1.058	3.02
1916	1.063	3.29	1943	1.041	2.96
1917	1.061	3.25	1944	1.060	3.06
1918	1.069	1.88	1945	1.061	3.08
1919	1.074	2.56	1946	1.035	3.36
1920	1.055	2.92	1947	1.061	3.76
1921	1.055	3.32	1948	1.049	3.44
1922	1.034	3.06	1949	1.051	3.52
1923	1.072	3.13	1950	1.052	3.74
1924	1.036	2.97	1951	1.039	3.76
1925	1.036	2.97	1952	1.058	3.95
1926	1.053	2.80	1953	1.063	4.10
1927	1.065	2.94	1954	1.073	4.60
1928	1.064	2.75	1955	1.066	4.31
1929	1.042	2.71	1956	1.060	4.48
1930	1.027	3.21	1957	1.055	4.32
1931	1.075	3.25	1958	1.064	4.47

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TABLE 45: DIVORCES AND NULLITIES, BY JUDICIAL DISTRICTS,
FOR THE YEAR 1958, ALBERTA

JUDICIAL DISTRICTS	DIVORCES			NULLITIES		
	Number of Divorces	Granted to Husband	Granted to Wife	Number of Nullities	Granted to Husband	Granted to Wife
Edmonton	374	156	218	2	1	1
Calgary	304	103	201	6	1	5
Lethbridge	32	19	13	1	1	.....
Medicine Hat	9	3	6	.....	.....	.....
Peace River .....	.....	.....	.....	.....	.....	.....
Grande Prairie .....	.....	.....	.....	.....	.....	.....
Hanna	2	1	1	.....	.....	.....
Red Deer	14	7	7	.....	.....	.....
Drumheller	1	.....	.....	.....	.....	.....
Fort Macleod	4	2	2	.....	.....	.....
Wetaskiwin	3	2	1	.....	.....	.....
Vegreville .....	.....	.....	.....	.....	.....	.....
Total	743	293	450	9	3	6

DIVORCES AND NULLITIES IN ALBERTA SINCE THE PASSING OF THE ACT

YEAR	Granted to Husband	Granted to Wife	Total
1919	3	3	6
1920	74	26	100
1921	53	37	90
1922	80	49	129
1923	57	32	89
1924	66	53	119
1925	59	42	101
1926	79	75	154
1927	83	66	149
1928	91	84	175
1929	77	71	148
1930	64	87	151
1931	69	87	156
1932	68	81	149
1933	56	79	135
1934	62	106	168
1935	74	135	209
1936	74	135	209
1937	102	139	241
1938	105	162	267
1939	104	163	267
1940	119	154	273
1941	135	176	311
1942	179	201	380
1943	190	223	413
1944	245	243	488
1945	302	273	575
1946	494	480	974
1947	404	478	882
1948	302	357	659
1949	262	332	594
1950	249	311	560
1951	255	334	589
1952	239	391	630
1953	228	375	603
1954	224	384	608
1955	233	394	627
1956	278	410	688
1957	317	409	726
1958	295	457	752

TABLE 46 — POPULATION, BIRTHS, MARRIAGES, DEATHS, AND RATES FOR THE YEARS 1905-1958

Year	Population	Number of Births	Birth Rate	No. of Births Received to Date	Number of Marriages	Marriage Rate	Number of Deaths	Death Rate	Infantile Death Rate per 1,000 Births	Puerperal Death Rate per 1,000 Births	Natural Increase
1905	185,000	4,221	22.81	4,221	187	10.38	114	7.36	90.00	.....	13.04
1906	186,000	3,003	20.41	4,917	1,927	10.35	1,091	5.86	100.27	6.33	13.36
1907	185,000	4,732	20.05	6,137	1,907	8.08	1,578	8.22	126.57	6.02	14.22
1908	266,000	5,973	22.45	7,744	2,384	7.63	2,188	8.21	.....	.....	14.00
1909	301,000	6,897	22.91	8,219	2,384	7.92	2,662	8.81	.....	.....	14.00
1910	374,000	8,321	22.25	9,752	3,086	9.18	3,526	9.49	129.49	8.63	13.88
1911	374,000	8,813	23.56	11,088	3,630	9.70	3,618	9.67	134.46	9.75	15.13
1912	400,000	10,284	25.71	12,990	4,429	11.07	4,232	10.58	124.75	8.26	15.13
1913	429,000	11,871	28.47	15,067	5,053	12.12	4,452	10.63	120.47	7.07	17.84
1914	488,000	13,685	30.75	16,670	4,623	10.39	4,417	9.32	100.54	6.13	21.43
1915	488,000	13,832	28.90	16,136	4,202	9.06	3,588	7.73	87.9	5.79	21.26
1916	496,000	14,331	27.87	15,802	4,202	8.54	3,588	8.18	90.5	7.20	18.69
1917	508,000	14,576	27.71	16,945	4,270	8.54	4,097	8.09	87.30	6.48	18.92
1918	522,000	14,890	27.72	16,945	4,048	6.98	4,097	7.90	107.10	5.51	11.86
1919	522,000	14,130	23.95	15,835	4,718	7.90	5,507	9.53	110.30	6.44	14.62
1920	565,000	16,565	26.72	16,721	4,661	7.92	5,675	8.39	83.05	7.38	17.57
1921	588,000	16,414	27.89	18,339	4,661	6.99	5,281	8.92	91.63	6.64	19.80
1922	592,000	16,163	26.44	16,806	4,272	6.99	4,843	8.06	90.54	5.50	18.73
1923	593,000	15,153	25.75	16,380	4,177	6.99	4,907	8.30	82.40	6.18	16.42
1924	597,000	14,598	24.74	15,596	4,160	7.50	4,843	8.06	82.40	5.76	16.16
1925	602,000	15,014	25.02	15,923	4,363	7.27	4,717	7.86	81.63	5.82	15.31
1926	608,000	14,455	23.79	15,511	4,498	7.40	5,156	8.49	74.51	6.38	15.87
1927	608,000	14,897	24.03	16,676	4,707	7.58	5,059	8.16	74.51	6.75	15.79
1928	658,000	16,592	24.99	16,590	5,776	9.12	5,689	9.00	76.50	6.75	15.79
1929	684,000	16,632	26.19	17,760	6,004	9.29	6,239	9.65	77.40	7.26	16.54
1930	708,000	17,844	26.19	18,319	6,004	7.08	5,366	8.33	63.57	6.46	18.41
1931	722,000	17,252	23.57	18,319	5,432	7.54	5,302	7.24	69.38	5.04	16.32
1932	740,000	16,890	22.93	18,874	5,054	6.83	5,346	7.46	58.68	3.76	15.50
1933	748,000	16,123	21.33	17,019	5,389	7.10	5,337	7.10	59.90	4.43	14.24
1934	756,000	16,236	21.10	17,105	6,053	7.87	5,729	7.3	57.8	4.99	14.01
1935	770,000	16,183	21.0	17,045	6,010	7.7	5,729	7.3	60.0	5.8	13.9
1936	772,782	15,786	20.4	16,507	6,020	7.8	6,147	8.0	63.0	4.9	12.4
1937	778,000	15,903	20.4	16,572	6,345	8.2	6,261	8.0	63.0	4.9	12.4
1938	783,000	15,891	20.3	16,528	6,893	8.9	5,871	7.5	51.0	4.3	12.8
1939	783,000	16,470	20.9	16,947	7,838	9.9	5,789	7.3	46.0	3.5	13.6
1940	783,000	17,359	21.8	17,751	8,782	11.0	6,203	7.8	48.0	3.9	14.1
1941	786,000	18,348	21.7	17,600	8,470	10.7	6,385	8.0	51.0	3.6	13.7
1942	805,000	19,297	22.7	18,575	9,034	11.2	6,091	7.5	38.0	2.3	15.2
1943	792,000	19,373	23.7	19,500	7,791	9.8	5,346	7.6	38.0	0.5	22.4
1944	818,000	19,373	23.7	19,492	7,791	9.8	5,346	7.6	42.0	2.7	16.1
1945	826,000	24.1	29.2	22,292	7,310	8.9	6,524	8.2	46.0	1.6	16.0
1946	803,330	22,184	27.6	22,292	9,478	11.8	6,524	7.7	43.0	2.4	16.2
1947	822,000	24,631	30.0	24,053	8,797	10.5	6,543	8.0	37.0	1.4	19.3
1948	846,000	24,075	28.5	24,964	8,844	10.5	6,543	8.0	39.0	1.0	20.2
1949	871,000	24,985	28.7	25,671	9,037	10.4	6,987	8.0	33.0	0.7	21.0
1950	885,000	25,625	28.7	27,043	9,305	9.9	6,856	7.7	32.0	0.7	23.7
1951	899,501	27,003	28.7	27,043	9,305	9.9	6,856	7.6	30.0	0.6	21.1
1952	970,000	31,376	30.0	31,376	9,514	9.8	7,167	7.6	30.0	0.3	22.3
1953	1,002,000	33,593	32.3	33,593	9,960	9.6	7,520	7.2	26.0	0.4	23.1
1954	1,065,000	34,947	31.1	34,947	9,965	9.2	7,956	7.5	25.0	0.4	24.2
1955	1,123,116	35,719	30.2	35,719	9,965	8.9	7,786	6.9	25.0	0.4	24.2
1956	1,160,000	35,719	30.2	35,719	10,117	8.7	8,237	7.1	27.0	0.5	23.7
1957	1,201,000	36,842	30.7	36,842	10,186	8.5	8,237	6.9	25.0	0.5	23.8

